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OUTCOME AND PROCESS COMPONENTS OF PLAY THERAPY

by

(C) JACQUELINE A. STINTON

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND
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FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Outcome and Process Components of Play Therapy", submitted by Jacqueline A. Stinton in partial fulfilment of the requirements for the degree of Master of Education in Counseling Psychology.

.....
Supervisor

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.....

Date..October 7, 1977

Play is the highest level of child development. It is the spontaneous expression of thought and feeling - an expression which his inner life requires...play is never trivial, it is serious and deeply significant...the core of the whole future, since the entire person is developed and revealed in the most sensitive qualities of his mind.

(Froebel, 1800's)

ABSTRACT

While the efficacy of play therapy as a treatment mode is widely accepted, little research is available to provide the therapist with a basis to monitor, assess and evaluate his effectiveness in therapy. Literature suggests the need for stringent outcome assessment measures and detailed specification of the play therapy process, thus the purpose of the present study was to focus on the outcome and process components of play therapy.

The study being exploratory in nature, the single case study approach was used to allow an indepth analysis of the outcome and process components. Two school age children referred for emotional difficulties participated as the subjects.

To investigate the outcome component, the experimental design used was that of pre- and post-testing. A battery of standardized tests encompassing social, emotional and cognitive functioning were selected and administered to each subject. Change in performance was assessed in terms of comparison and interpretation of pre- and post-therapy test results. The process component piloted the use of a tri-level hierarchical play rating system to rate the quality of the child's play activities in therapy. Movement through the play levels and the type of play occurring at different stages in therapy was postulated to be indicative of movement through therapy.

Results of the outcome component indicated progress through therapy with qualitative and quantitative changes being recorded. Qualitative gains were noted in the areas of interpersonal relations, school adjustment, self-concept and family relationships. Significant

quantitative gains were achieved on three tests having a perceptual element in common. These specific gains were considered to introduce new dimensions in the study on outcome of therapy and speculations were raised as to the nature of the therapy process in effecting the particular changes.

Results of the process component indicated quantitative changes in the range and quality of the child's play activities from the beginning to end of therapy. An expanded behavioral response repertoire was noted and was related to the nature of the play therapy process.

In conclusion, the relationship between the results achieved in both the outcome and process components was discussed in terms of the nature of the play therapy process as postulated and investigated. Implications for play therapy were proposed. It was concluded that further investigation of the specific test measures and the play rating system used in evaluating outcome and process in play therapy, appeared warranted both in practice and research. Areas of further investigation were suggested.

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TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION	1
II.	PLAY AND PLAY THERAPY	4
	Theories of Play	4
	Development of Play as a Form of Therapy	8
	Review of the Literature	11
	Research Related to Play Therapy	11
	Research on Outcome of Play Therapy	12
	Research on Process in Play Therapy	16
	Research Related to Influencing Variables	22
	Rationale for the Use of the Single Subject Study	29
III.	METHODOLOGY	38
	Introduction	38
	Experimental Design	38
	Subjects	39
	Therapist and Therapist Orientation	41
	Description of Treatment	42
	Outcome Component	43
	Collection of Data	43
	Test Instruments Used	44
	Analysis of Data	52
	Process Component	53
	The Play Rating Scale	55
	Collection of Data	60
	Analysis of Data	61

CHAPTER PAGE

IV. RESULTS AND DISCUSSION..... 62

Results of the Outcome Component..... 62

Tests Administered and Change Noted..... 65

Discussion of the Outcome Component..... 74

Introduction..... 74

Tests Indicating Change..... 74

Nature of the Element Common to the Tests: Perceptual Factor..... 75

Nature of the Element Common to the Tests: Emotional Factor..... 77

Possible Explanations for Increments in Test Scores..... 78

Significance of Perception in Development..... 79

Relation of Perception to Test Measures Specified..... 80

Perception and Implications for Play Therapy..... 81

Summary of Results and Discussion..... 82

Results of the Process Component..... 83

Discussion of the Process Component..... 91

Introduction..... 91

Adaptive Behavior: A Function of Play..... 91

The Nature of Play..... 92

Characteristics of Play: Actions..... 93

Characteristics of Play: Outcomes..... 94

CHAPTER PAGE

Present Study: Actions and Outcomes in Play..... 95

Implications for Play Therapy..... 95

Summary of Results and Discussion..... 97

V. CONCLUSION, LIMITATIONS AND IMPLICATIONS FOR FURTHER RESEARCH..... 99

Conclusion..... 102

Limitations..... 103

Implications for Further Research..... 104

BIBLIOGRAPHY..... 106

APPENDIX A: THEORIES OF PLAY..... 115

APPENDIX B: RESEARCH ON OUTCOME IN PLAY THERAPY..... 121

APPENDIX C: VARIABLES IN PROCESS/OUTCOME RESEARCH IN PLAY THERAPY: SUBJECT AGE, SUBJECT NUMBER, DURATION OF TREATMENT..... 123

APPENDIX D: VARIABLES IN PROCESS/OUTCOME RESEARCH IN PLAY THERAPY: SAMPLE SIZE, TYPE OF TREATMENT, GROUP SIZE..... 125

APPENDIX E: TEST SELECTION: INSTRUMENTS USED AND VARIABLES INVESTIGATED..... 127

LIST OF TABLES

TABLE		PAGE
1	Variables Investigated and Test Instruments Used.....	45
2	Chad: Test and Retest Interval.....	63
3	Shauna: Test and Retest Interval.....	63
4	Comparison of Pre- and Post-Test Results on Five Test Measures.....	64
5	The Efficacy and Value of Each Test Instrument as Rated by the Test Interpreters.....	73
6	Chad: Frequency of Responses for Each Level of Play.....	83
7	Chad: Composite Frequency of Play Level Scores for Each Stage of Therapy.....	84
8	Chad: Percentage of Play Level Activity at Beginning and End of Therapy.....	85
9	Shauna: Frequency of Responses for Each Level of Play.....	87
10	Shauna: Composite Frequency of Play Level Scores for Each Stage of Therapy.....	88
11	Shauna: Percentage of Play Level Activity at Beginning and End of Therapy.....	89

LIST OF FIGURES

FIGURE		PAGE
1	Chad: A Comparison of Pre- and Post-Test Results on the Family Relations Test	68
2	Shauna: A Comparison of Pre- and Post-Test Results on the Family Relations Test	69
3	Chad: Frequency of Play Level Scores at Three Stages in Therapy	84
4	Chad: Percentage of Play Level Activity at Two Stages in Therapy	86
5	Shauna: Frequency of Play Level Scores at Three Stages in Therapy	88
6	Shauna: Percentage of Play Level Activity at Two Stages in Therapy	90

CHAPTER I

INTRODUCTION

Research in play therapy has been minimal and at best, inconclusive (Lebo, 1953; Ginott, 1961; McNabb, 1975). Lebo states that:

> research in nondirective therapy with adults is sound and extensive. Research in nondirective play therapy with children is still meager, unsound, and frequently of a cheerful, persuasive nature. It has seemed to the present writer that such articles could be more correctly classified as propaganda than as research. (Lebo, 1953, p. 177)

Thus, while the efficacy of play therapy as a treatment mode is unquestioned, little research is available to provide the therapist/counsellor with a theoretical basis to monitor, assess, and evaluate the efficiency of his skill or effectiveness in therapy. At present, subjective reports based on intuition and "good feelings" of the therapist as well as reports on behavior change from teachers and parents (again largely subjective), suffice to monitor the child's progress and to determine the termination of treatment. It is felt that an objective "play-bound" system of monitoring therapy would be suited to and generalizable to different diagnoses, and theoretical positions.

The need, then, for a detailed specification of the process of play therapy is acute if the effectiveness of play therapy is to be evaluated (Pumfrey & Elliott, 1970). However, the question of what is the process of play therapy, has been left unanswered (Dorfman, 1951; Ginott, 1961). Ginott (1961) states:

> on the basis of research, it is impossible as yet to answer the fundamental question: How is improved adjustment attained in play therapy? There is an obvious need for an integrated series of investigations focused on the internal dimensions of play therapy; first and foremost, the process itself needs to be scrutinized and its lawfulness discovered. (p. 155)

The further investigation of these still unanswered questions, provides the rationale for monitoring research in play therapy, and indicates that emphasis should be placed on quantitative recordings and analysis of the process and outcome of play therapy. For if the process is known, the goals and desired outcomes can be defined in a more specific manner and the treatment process structured more effectively. The benefits and advantages of this are, of course, obvious and provide the justification for the study: the advantages relate to the concerns of generalizability and applicability of play therapy in terms of treatment setting, therapist variables, and differential diagnoses. Greater objectivity related to process and outcome would enhance the credibility of play therapy as a treatment technique, as well as further the establishment of effective and practical training procedures for those involved in the helping professions with children.

Thus, the focus of the present study has been derived from both the need for a detailed analysis of process in play therapy (Ginott, 1961: Pumfrey & Elliott, 1970); and the need for a more stringent assessment of outcome measures (West, 1969; Herd, 1969; Quattlebaum, 1970; Pumfrey & Elliott, 1970). The purpose of the study is twofold:

1. To obtain quantitative measures before and after the play therapy treatment programs as objective means for evaluating outcomes of the therapeutic process.

2. To pilot the use of a tri-level hierarchy of play rating systems for monitoring and analyzing the interaction between therapist and child. Resulting data will be used as a possible means of evaluating both outcome and process in play therapy.

The primary intent then, is to evaluate the play therapy experience in terms of process and outcome. The present investigation, in examining the nature of the interaction of therapist and child in a play

therapy situation, is to test techniques, provide preliminary checks on hypotheses and investigate quantitative measures of process and outcome. The study involves the analysis of one therapist's interaction with two single subjects, and is essentially exploratory in nature: the indepth analysis proposed is intended to serve as a catalyst to the refinement and expansion of the system in future research.

CHAPTER II

> Play reveals the breadth or limitation of the child's horizon, the independence of his character, or his need of support and direction (Groos, 1916, p. 404).

Theories of Play

To provide a frame-work for the present study and to strengthen the rationale for the use of play as a therapeutic medium, the major theories of play, and principles and convictions arising from them, will be presented in summarized form. A more comprehensive overview of the theories will be found in Appendix A.

Theories dealing with play can be placed in two general categories, the older (classical) theories, and the newer (dynamic) theories (Jackson and Angelino, 1974).

Early Theories

Early ideas about play extend back to Greek civilization: the ancient Greeks believed that the knowledgeable man and the good worker was the man who could also appreciate play (Wolfgang, 1974). Nineteenth century theorists viewed play in several different ways: as the product of surplus energy; as the organism in a state of restfulness; as a pre-exercise for adult activity; or as another aspect of mans' ontogenetic recapitulation of phylogeny.

One of the first known theories of play was proposed and presented by Spencer in 1897 and Schiller in 1954 (in Neumann, 1971). According to this theory, commonly referred to as the "surplus energy theory", energy within the individual not expended in the task of self-preservation and survival was released in the 'aimless' activity of play. Millar (1968) states the theory in its simplest form as being the notion that

children play to "blow off steam". Objections to the theory point out that play can have a purpose as in dramatic play and sports (Neumann, 1971), and that a surplus of energy is not necessary for play as children engage in play activites even when fatigued (Millar, 1968; Ellis, 1973).

Another of the oldest known theories of play is the "relaxation theory: as advocated by Lazarus in 1883 and extended by Patrick in 1914 (Neumann, 1971). This theory views play as a product of deficient energy rather than that of surplus energy. Play is thought to act as a restorative to energies dissipated through mental and physical strain; thus the function of play is relaxation, which allows for recuperation (Neumann, 1971). The theory is criticized on the grounds that it does not explain the play of children (Ellis, 1973).

Karl Groos

Karl Groos elaborated his theory of play in 1899. Groos believed play to be a form of instinctive behavior, and play activities as preparation and practice in the development of skills essential for future survival. Play, which had previously been defined as aimless, was considered to have a serious biological purpose (Millar, 1968). The play of the child trained and refined to prepare him for the demands of his complex role as an adult. The argument raised against Groos' theory is that play does not cease in adulthood, when adults are presumed to be adequately prepared (Ellis, 1973).

Hall

The recapitulation theory proposed by Hall in 1906 (Millar, 1968; Neumann, 1971) was summarized in the statement "ontogeny recapitulates phylogeny": the child relives the history of his race and progressively

"re-enacts in play the interests and occupations (of his ancestors) in the sequence in which they occurred in prehistoric and primitive man" (Millar, 1968, p.17). Current theories of play reject the recapitulation theory in that it is widely recognized that the child imitates the behavior of significant others in his environment rather than his prehistoric ancestors (Neumann, 1971). The theory also does not allow for play activities simulating experiences resulting from advanced technology rather than ancient experiences (Millar, 1968; Ellis, 1973).

The more recent theories of play to be considered include the psychoanalytic theory as set forth by Freud, Piaget's developmental theory, and learning theory.

Freud

Freud's major concern was with the emotional-social development of the child. He proposed that through play, the child was allowed to release socially unacceptable emotions. According to Freud, play acts as a purge or catharsis of the child's emotions. Also, through play, the child achieves a sense of mastery and competence in his environment. The feeling of mastery is gained through repetition of experiences and events, thus repetition and rehearsal are important elements in play (Neumann, 1971).

Piaget

Piaget emphasized the cognitive development of the child. He viewed play as an essential part of the development of intelligence and personality. Piaget's cognitive orientation to play operates on the premise that through play and play activities, a child assimilates knowledge about his environment, and rehearses and practices life tasks.

Thus play is a means of adaptation to the environment. In terms of Piagetian theory, Neumann (1971) suggests that:

> the crucial factors for cognitive development is the quality and quantity of interaction with the environment, not only in terms of experience with the physical world but also in terms of encounters with other people (Neumann, 1971, p. 76).

Learning Theory View

Learning theorists hold the view that "play needs no special explanation other than that found to hold for behaviors in general" (Millar, 1968, p. 38). That is, the child's play behaviors are regulated by environmental consequences, with the child acting to increase the probability of positive experiences and decrease the probability of negative experiences (Ellis, 1973).

Despite one's adherence to any particular theoretical orientation the extensive literature on childrens' play arising from a number of diverse orientations emphasizes the power of play throughout the childhood years. Whether operating from the view-point of a social theorist, a psychoanalyst, a cognitive theorist, a behavior theorist or a developmental theorist, it is undisputed that play assumes a vital role in development in fostering physical, mental, social and emotional growth. It is recognized that through his play, the child reveals not only his cognitive maturity, but his individual interests and emotional needs (Wolfgang, 1974). McLellan (1970) states succinctly:

> We now accept without question the child's right to play. We are deeply concerned with the manner in which the child plays, the materials he uses, and what happens to him if he does not play (McLellan, 1970, p. 4).

Present Study View

The element common to all theories then, appears to be that play serves as the process through which the child relates to his environ-

ment and attempts to function effectively within it. But what of the child showing disturbances in his way of adapting to or coping with his world? If play is the very essence of childhood, and if the child uses play as his most natural means of expression, it appears only logical and rational that play be used as a means of reaching and communicating with those children in need of special help.

The Development of Play as a Form of Therapy

Froebel, in the 1800's, described play as "the highest expression of human development in childhood for it alone is the free expression of what is in the child's soul" (Froebel, cited by Lowenfeld, 1935).

While Plato appeared to recognize the importance of games in teaching children, Rousseau has been claimed to be the first person who stressed the importance of studying the play of children in order to understand them (Lebo, 1958). However, Rousseau's main interest lay in the educative purposes of play (McNabb, 1975).

The first published instance of play being used as therapy was Freud's account of his work with 'Little Hans' in 1955. Freud interpreted records of the play of Little Hans in terms of his psychosexual theory of development. In the application of adult psychoanalytic principles to child therapy, several weaknesses became apparent, and led to the development of a new approach, that of child analysis.

The major proponents of child analysis were Melanie Klein and Anna Freud. Although differing in their beliefs and techniques of analysis, both therapists modified the traditional psychoanalytic approach by stressing the importance of play and toys as an analytical

device in working with children. Child analysis was recognized as distinct and separate from adult psychoanalysis.

Other forms of play therapy developed as offshoots of psychoanalytic play therapy. One of these became known as structured therapy (Hambridge, 1955). Using this technique, the therapist structures the play situation to resemble the child's current stressful life situation. The therapist facilitates the play activity to enable the child to 'play out' the situation and obtain some form of emotional release.

Relationship therapy based on the philosophy of Otto Rank evolved as a form of therapy distinct from psychoanalytic therapy (McNabb, 1975). The development of a dynamic relationship between the therapist and child was considered to be crucial, and emphasis was placed entirely on the present situation of the child. In therapy, the child is allowed to choose the play activities to be engaged in while the therapist participates at the child's discretion (Lebo, 1958; McNabb, 1975).

Relationship theory merged into the non-directive approach to play therapy. The principles of Carl Rogers client-centered philosophy were adapted and successfully applied to play therapy by Virginia Axline (McNabb, 1975). The basic tenet of non-directive play therapy as proposed by Axline (1955) is this: by providing the child with an atmosphere of unconditional acceptance, an increase in the unconditional self-regard of the child will occur, reinforcing his belief in his own ability to cope with stressful situations.

In conclusion, Lebo (1958) states:

> The development of play in child therapy was an inevitable process, for play therapy, no matter on which therapeutic theory it is based, provides the child with a natural avenue of approach to the therapist (Lebo, 1958, p. 421).

Thus, while slight difference in one's approach to and technique of play therapy do naturally exist as a function of therapist orientations and individual personality factors, play therapy as a form of child therapy has been accepted and applied in a variety of settings.

REVIEW OF THE LITERATURE

Research Related to Play Therapy

Until recently, research in play therapy had been minimal. Much of what had been written consisted of "arm-chair" philosophy, unsupported theory, and complete case study protocols (McNabb, 1975). In a review of the research done in play therapy, Lebo described much of the literature as "meager, unsound, and frequently of a cheerful, persuasive nature" (1953, p. 177). McNabb (1975) described the area of play therapy as a field which had been somewhat lax in quantifying and based this statement on the opinion that philosophy and emotionality in reference to a treatment method is not enough to prove professionality in that area.

Although there is still a scarcity of materials to be found in current journals and published materials, the more recent literature reveals a trend towards documentation and research methods in the area. The research has dealt with specific variables affecting the play therapy process and outcome. However, the results reported are generally inconclusive, and at times, confusing.

This chapter will deal with the documentation of research in the areas of process and outcome in play therapy. An overview of research pertinent to the area will be presented in an attempt to provide the background of information which will point to the rationale and need for the present study. Material found will be divided into separate sections reporting on outcome and process.

Research on Outcome of Play Therapy

Outcomes of play therapy may be considered in two ways: 1) as pre- and post-treatment changes in children and 2) as session to session changes during treatment (Krivy, 1972).

Research on outcome has tended mainly to be composed of the pre- and post-test measure variety. The basic experimental design typically consisted of pre- and post-test procedures using a combination of measures such as personality tests, sociometric measures, and a variety of behavior checklists. The outcome has been evaluated in terms of changes in the test results after a series of therapy sessions. It was found that reliable test improvements did occur concomitantly with a series of therapy sessions (Dorfman, 1958).

Those studies concerned with the evaluation of the outcome of the play therapy process in terms of a pre- and post-test design will be discussed first while session to session changes during treatment will provide the focus for the next section.

Research in the area of assessment of outcome as determined by pre- and post-therapy test measures have been primarily concerned with changes in terms of socialization and adjustment. Studies have been done in the areas of interpersonal relations, parent-child relationships, achievement, school adjustment, and self-concept. Test measures used have included a variety of standardized test instruments, projective tests, and sociometric measures.

The first reported research (Fleming and Snyder,. 1947) investigated the significance of play therapy in affecting social and personal changes in young girls. The test instruments used included Rogers' Personality Test, a sociometric test of acceptance/rejection devised by

Fleming, and a peer rating scale. It was found that the experimental group improved more than did the control group, with the greatest improvement occurring in the area of personal feelings to self. Least improvement occurred in social adjustment. However, the findings are limited in that the experimental and control group were not equated for maladjustment, and the treatment of the groups were not identical (Ginott, 1961).

Cox (1953) investigated the nature of interpersonal relations and individual adjustment before and after therapy. The subjects were matched on the basis of responses on adjustment questionnaires, Thematic Apperception Test scores and sociometric measures. The adjustment scores and peer ratings of approximately 50% of the experimental group showed improvement. The control group showed no gain.

Research to study the personality outcomes of play therapy was conducted by Dorfman (1958). The subjects were described as maladjusted by their teachers. Measures used included Rogers' Test of Personality Adjustment, Machover's Human Figure Drawing, and Dorfman's Modified Sentence Completion Form. Follow up letters asking participants to describe their therapy memories and current life status were also used. Improvements on test scores were found to occur however, data was lacking on behavioral changes such as better interpersonal relations, and more mature behavior which could be expected to occur after therapy (Ginott, 1961).

The interpersonal relations of elementary school children as a result of having received play therapy were studied by Seeman, Barry and Ellinwood (1964). The findings of the study suggested that children involved in play therapy were perceived by others as being significantly

less maladjusted after therapy. Test measures used included the Tuddenham Reputation Test and the Radke-Yarrow Teacher Rating Scale.

West (1969) used a pre- and post-design in examing the variables of intelligence scores, self-concept, social adjustment, and perception of school adjustment. Instruments used included the Wechsler Intelligence Scale for Children, the Goodenough-Harris Draw a Person Test, the Self-Esteem Inventory, the School Apperception Method, and a sociometric measure. Results indicated no significant benefit due to exposure to play therapy. It was hypothesized that the instruments used may have been inadequate and that there is a need for more stringent and comprehensive experimental assessment devices.

A battery of tests including the California Test of Personality, the Vineland Social Maturity Scale, the Haggerty-Olson-Wickman Behavior Rating Scale, a sociometric measure, and school grades was used by Herd (1969). She attempted to investigate the relationship of play therapy to behavioral changes in interpersonal relationships, desirable behavior patterns, a more adequate use of intellectual capacities and improved adjustment. Little statistical significance was found on the measuring data to support the hypothesis that positive behavioral changes would occur as a result of play therapy. However, non-statistical evidence in the form of interviews with and letters from parents and teachers, as well as observations made by the therapist provided evidence which supported the hypothesis. The possible insensitivity of the test instruments was cited as a reason for the lack of statistical significance in the results and the use of pen and paper tests was recommended.

Pumfrey & Elliott (1970) mentioned the use of the Stott Bristol Social Adjustment Guides (Stott, 1962) as a potential device to measure adjustment. No quantitative results were given.

The effectiveness of play therapy with maladjusted fifth grade pupils was investigated by Quattlebaum (1970). An analysis of the pre- and post-results of the Rorschach, the Draw a Person Test, and the Thematic Apperception Test revealed no significant overall improvement in the self-concept of the pupils. Behaviors of individual children did improve, however, as a result of treatment. It was recommended that different assessment techniques be investigated.

Based on the results of the pre- and post-test evaluation of the Missouri Children's Picture Series, the Children's Self Social Constructs Test, and a Behavior Problem Checklist, Pelham (1972) concluded that few significant differences in social maturity could be found between the experimental and control groups of kindergarten children. However, teachers rated the experimental children as better adjusted in the classroom.

Krivy (1972) assessed the outcome of play therapy treatment with under-achieving children. Outcome was assessed on the basis of changes in adjustment scores on a Sentence Completion Test (Dorfman's modified criteria, 1955), and of changes as measured by a checklist corresponding to the characteristics of Erikson's first five stages of development (Erikson, 1950). It was found that under-achievers who were counselled according to play therapy techniques showed greater improvement in adjustment as measured by the Sentence Completion Test. There was no significant difference in the amount of change occurring as measured by the checklist. It was assumed that the checklist may not have been a

valid instrument of measurement.

In the last study reported, Wall (1973) investigated the effects of play therapy in terms of behavioral changes, and as a means of developing positive self-concept and motivation of educationally handicapped children. The Self-Concept Motivational Inventory was administered to the subjects and each child was rated on the Burk's Behavior Rating Scale. The results of the study supported the proposition that play therapy was beneficial for learning disabled children as significant positive changes in self-concept and motivation attributes were found among the experimental group. Significant positive behavioral change was found to be predominant among the experimental groups.

It is clear that a review of the literature relevant to the outcome of play therapy in terms of improvement according to test criteria, provides no unequivocable proof of change in either a positive or negative direction. An overview of the research presented in summary form in Appendix B, shows there is a scarcity of data available which statistically substantiates significant results due to play therapy.

In the realization of the need for the development of more valid and discriminating change criteria, and in the recognition of the importance of analyzing the effects of play therapy in terms of the process rather than the final outcome, more emphasis is currently being placed on the process area. The following section will focus on research done in the area of process in play therapy.

Research on Process in Play Therapy

Krivy (1972) stated that while children may show little post-therapy changes in terms of measurable personality factors, "one would

not challenge that some changes of a positive or negative nature take place during the process of play therapy from session to session" (p. 93). The question of concern, based on the conviction of the therapeutic aspects of play becomes one of how to evaluate the therapeutic process in play therapy as an indication that change is actually taking place.

The difficulties of a model of research in evaluation of the effects of play therapy was discussed by Heinicke and Goldman (1960). The suggestion was made that the clearest observation of the benefits of child therapy would be offered when research is done in the area of process.

Process, then, as described in this section will refer to the interactions which occur during the course of the play therapy experience. That is, process refers to the movement within the relationship as a result of therapist-child interactions (McNabb, 1975).

As early as 1957, Levitt pointed to the fact that quantification of the play therapy process was necessary. Attempts to quantify the therapeutic aspects of play resulted in several classification schemes. These have included the identification of stages of development of process, the description of movement through the stages, and the categorization of attitudes and types of verbalizations typifying the various stages.

An overview of the research done in the area of process as experienced by the child in play therapy will be presented.

Typically, the research has been concentrated on the emotional process in terms of changes in attitudes and feelings throughout the play therapy experience. The changes in emotional tones have usually been monitored and assessed through an analysis of the child's

verbalizations. Other studies have dealt with the stages and pattern of play activities engaged in. Those studies dealing with the emotional process will be discussed first as they present the bulk of the literature. The studies concerned with play behavior will then be discussed.

Landisberg and Snyder (1946) devised categories of process based on the analysis of the child's speech and actions during play therapy. The analysis included the categories of content, attitudes and activities. Similarities in the play therapy process were found in terms of the expression and release of emotional feelings. Criticism directed at the study concerned the idea that the analysis was based on categories derived from adult scales which were then applied to the childrens' statements and activities (Lebo, 1953; Ginott, 1961).

Finke (1947) investigated the child's changing emotional reactions resulting from play therapy. New categories were developed, again based on an analysis of the childrens' statements during play therapy. The analysis revealed similar trends which appeared to divide the process of play therapy into three stages. These stages included the initial stage, where the child is either verbose or reticent; the middle stage, where the limits of the situation are tested; and the final stage, where the relationship with the therapist is established. Ginott (1961) criticized the study on the grounds that the sessions were not electronically recorded, and that the analysis was made of the verbal statements only. The expression of feelings through the play activities was not included.

In describing the process of play therapy, Axline (1950) suggested that the feelings of the child could be categorized into four general levels. The child was said to move through the categories to the highest

level which consisted of "feelings for which the child assumes responsibility" (p. 73).

Finke's (1947) categories for quantifying the play therapy process were criticized by Lebo (1953) in that the scales failed to recognize that the categories described could vary significantly from one level of the child's maturity to the next. Lebo revised the categories to include two additional scales that would differentiate the types of verbalizations of younger and older children. The revised scales were renamed the Borke Process Scales (Lebo, 1953). Again, however, the analysis and quantification of the scale was restricted to the verbal expression of feelings (Dorfman, 1958; Ginott, 1961).

Moustakas (1955a) focused on the emotional process in play therapy. The protocols of childrens' statements were rated in terms of the frequency and intensity of the expression of negative attitudes. The statements were classified under a three point scale of minor, moderate and severe intensity. It was concluded that as therapy progressed, the negative attitudes were expressed more clearly, more specifically, and less frequently. In a later study, Moustakas (1955b) indicated that the levels of emotional growth moved through certain predictable stages of development. Through analysis of case studies of disturbed children in play therapy, Moustakas reported a parallel between normal emotional development and the emotional growth occurring in a play therapy relationship. He suggested that movement occurred from pervasive, generalized and negative attitudes to clear, distinct and usually realistic positive and negative attitudes. The movement in the play therapy process was said to occur in individually varying sequences.

Ginott (1961) criticized this sequence on the grounds that while the postulates themselves were valuable, the illustrative excerpts seemed arbitrarily selected and subjectively interpreted.

The process of play therapy was identified by Cashdon (1967) on the basis of drawings made by the child. The process as revealed by the drawings was divided into five stages including: 1) statement of the problem, 2) definition of the terms of the relationship, 3) emotional learning; the development of trust, 4) process of separation from the therapist, and 5) adaptation and adjustment mode.

A comprehensive study of the process of play therapy was undertaken by Hendricks (1972). In an attempt to determine and describe the development of the emotional and social phases of the play therapy process, the patterns of play activities, nonverbal expressions, and verbal comments made were analyzed and described. On the basis of data gathered, some distinctive patterns of play activities were reported and distinctive phases of emotional/social development were described. It was concluded that the changes were not always identifiable and that the changes occurred in no specific sequential order. The levels of the play therapy process were found to overlap at many points.

In another study of the activity/behavior process in play therapy, Daly and Carr (1967) explored the nature of tactile contact. The recording of movements, verbalizations and tactile contacts revealed significant differences in the nature and frequency of the tactile contacts made by disturbed children during the course of therapy.

Three stages of play activity in the process of play therapy were identified by Rogers (1969). These stages were identified and described as: 1) the exploratory, 2) the aggressive, and 3) the constructive stages.

Bishop (1972) suggested three phases of the child's behavior during play therapy. These phases were based on the attempt to disregard the usual dichotomies of technique (non-directive and directive) in focusing on all aspects of the play therapy process. As the process continues, the child moves through the phases described as: 1) sensory motor, 2) perceptual, and 3) conceptual behaviors. This system will be described in greater detail at a later point, as it provides the focus for the process component of the present study.

Finally, one study only was found which attempted to measure discrete aspects of therapist-child interaction. Moustakas and Schalock (1955) designed the study to examine the nature of the interaction between therapist and child in the play therapy situation. It was reported that the most frequent categories of therapist behavior included those of attentive observation, recognition of stimulation, offering verbal information, interpretation by restatement of verbalized feelings, and seeking impersonal information. The most frequently used categories of child's behavior included non-attention, attentive observation, statement of condition or action, seeking information, giving information verbally, recognition of stimulation, and non-recognition of stimulation.

It should be obvious that not only is there a scarcity of material published on the process of play therapy, but that those studies reported contain specific limitations. The limitations include the concerns that scales were based on verbalizations of sessions that were not electronically recorded (Landisberg and Snyder, 1946; Finke, 1947), scales were based on illustrative excerpts that seemed arbitrarily selected (Axline, 1950; Moustakas, 1955), scales were primarily verbal in nature (Landisberg and Snyder, 1946; Finke, 1947; Lebo, 1953;

Moustakas, 1955), and the analyses were based on the use of adult categories (Landisberg and Snyder, 1946; Finke, 1947; Lebo, 1953).

McNabb (1975) suggests that the lack of research data points to the fact that new techniques and models for research need to be developed which will be sensitive enough to evaluate process and outcome in the field of play therapy. Pumfrey and Elliott (1970) warns that process and outcome should be combined, that is, research should consider the question of process as what happens and what changes take place in play therapy. It was recommended that sounder procedures in process research would be to develop methods of the evaluation of process which would combine ways of assessing both activity and interaction (McNabb, 1975).

Research Related to Influencing Variables

Several variables pertaining to previous research studies were felt necessary to investigate in regard to possible affect in influencing process and outcome of play therapy.

The variables include those of age of the subject, duration of treatment in terms of session length and treatment length, and number of subjects used. A comprehensive overview of these variables in process and outcome research is presented in Appendix C. A review of the literature pertinent to the variables will be briefly discussed.

The Age Variable

Case studies in the general area of play therapy have reported successful results with children as young as three years old (Holmer, 1937), and four years old (Axline, 1948; Andronico & Guerney, 1969). Other cases have dealt with six year olds (Styrt et al, 1965), eight year olds (Pothier, 1967), nine year olds (King & Ekstein, 1967) and ten

year olds (Andriola, 1944; Miller, 1947; Machler, 1965). Lebo (1956), in discussing the age and suitability of children for play therapy suggested that the lower limit of suitability be established by the maturational process: Lebo felt that three year olds could not satisfactorily perform the two motor acts of talking and playing simultaneously. Thus, the benefits of play therapy would be limited with children as young as three years. The upper limit for suitability was arbitrarily set at age twelve.

Although Lebo (1956) stressed the need for experimental evidence regarding the matter of age and suitability for play therapy, only three studies were found which examined the specific influence of age of subject in relation to process and outcome.

The first of these studies was conducted by Lebo (1952) who investigated the relationship between age and response categories in play therapy. Five age levels of children (ages four, six, eight, ten and twelve) were represented, and the Borke Process Scale was used to categorize the types of statements made. An analysis of the categorized statements revealed definite trends in the types of verbalizations made by the children at different age levels. Older children were found to discuss their decisions less, to verbalize their likes and dislikes more readily, to play more independently, and to test fewer limits. Lebo suggested that maturation, as represented by chronological age, accounted for the trends seen.

In a further study, Lebo (1956) analyzed data consisting of 4,092 statements made by 20 normal children in the four, six, eight and twelve year old age categories. Lebo concluded that toys in play therapy tended to restrict the verbalizations of the older children.

The use of more age-appropriate toys and material was recommended.

Again, Lebo and Lebo (1957) investigated the variable of age of subject in play therapy in terms of the question of age and aggression in relation to verbal expression. The age of the subjects ranged from four to twelve. It was reported that six year old children made more aggressive verbalizations than did any other age group and that younger children made more attempts to relate to the therapist than did the older children. The older children made fewer favorable comments about themselves. It was concluded that aggression and age exerted a significant influence on the amount and variety of speech produced by normal children in play therapy.

Thus, while research has been reported on the age variable as it affects the use of toys or the types of verbalizations made in play therapy, no research was found that dealt specifically with the variable of age and its effect on process outcome.

However, the research to date on process and outcome has used a wide range of subjects' age, including five to six year olds (Pelham, 1972), six to seven year olds (Rhinard, 1970), six to eleven year olds (Herd, 1969; West, 1969), six to thirteen year olds (Wall, 1973), eight to nine year olds (Perkins, 1968; Seeman, Barry and Ellinwood, 1968; Krivy, 1972), eight to ten year olds (Hendricks, 1972), nine to twelve year olds (Dorfman, 1958) and eleven year olds (Quattlebaum, 1970). No mention was made of the effect age might have in terms of the results of the various studies. McNabb (1975) suggests that the neglect apparent in attending to age differences in play therapy research has arisen perhaps from the philosophy of taking the child "where he is" (Lebo, 1956) and contending that this refers to the psychological or emotional

set rather than to the maturational aspect.

Thus while the research is not comprehensive in terms of the effects of the age factor, the lack of material points to the possible need for exploring the age variable as it affects process and outcome.

Duration of Therapy

Duration of therapy will be discussed in two ways: in terms of length of treatment time and in terms of length of therapy session.

In regard to general psychotherapy, Barbour and Beedell (1955) found no difference between the outcomes of short term therapy (under ten sessions) and long term therapy (over sixteen sessions). Phillips (1960) compared the effects of short term and conventional therapy. The results indicated that short term therapy (four to ten sessions) was more effective than long term therapy (more than ten to twelve sessions). It was suggested that it was possible in some cases to evolve or design procedures which would shorten therapy without jeopardizing the results. Evidence appears that short term methods of treatment are as effective as longer conventional methods.

Only one study was found that reported directly on the variable of duration as it would affect results in play therapy. Levi (1961, in McNabb, 1975) investigated several variables affecting child therapy outcome. Of the variables investigated which included age, sex, and symptom of child, identity of therapist, and length of treatment, only the identity of therapist and length of treatment were found to be related to outcome. The more expert therapist achieved a higher level of success in a shorter time. Less able therapists achieved success but in a longer length of time.

Thus again, no substantive investigations dealing specifically with the problem of duration of treatment as affecting process and outcome in play therapy have been reported.

The studies investigating process and outcome have used many different combinations of therapy time in terms of both session time and total number of sessions. The choice made in regard to these two variables appears to be arbitrary. The duration of the actual therapy session has ranged from 20 minutes (Perkins, 1968) to 30 minutes (Krivy, 1972; Wall, 1973), to 40 minutes (Rhinard, 1970; Pelham, 1972). The average time per therapy session appears to be approximately 45 minutes to one hour in length (Dorfman, 1958; Moustakas, 1955; Herd, 1969; West, 1969; Quattlebaum, 1970; Hendricks, 1972; Siegel, 1971).

In terms of the total number of therapy sessions, the usual format has been that of weekly sessions for six to eight sessions (Krivy, 1972; Pelham, 1972), ten sessions (Herd, 1969; West, 1969), twelve sessions (Hendricks, 1972), and sixteen sessions (Quattlebaum, 1970; Siegel, 1973), to an average of nineteen sessions (Dorfman, 1958). Wall (1973) used a total of twenty-four sessions on a bi-weekly basis, while Perkins (1968) and Rhinard (1970) used a thrice weekly format.

It is a curious note that research reports simply do not give a rationale for the treatment variables of length of session time and length of treatment time. Certain studies, however, have recommended that treatment time be extended in that results obtained may have been more significant had therapy time been extended (West, 1969; Herd, 1969; Pumfrey & Elliott, 1970). The problem and efforts of duration of treatment can be an area of further investigation.

Variable of Sample Size

The final variable to be considered is that of the number of subjects used in studies concerned with play therapy. In this section, data will be presented from relevant studies and a rationale for the use of a single case study will be developed and elaborated.

Research on process and outcome in play therapy have used differing numbers of subjects in various combinations of control groups, treatment groups, experimental groups, placebo groups, etc. Again, in no study attempted, was a rationale presented for the choice of subject number or allocation to subject group.

Studies on process in play therapy have used from four subjects (Landisberg & Snyder, 1946) to twenty-two (Axline, 1950). The subjects in Axline's study, however, were accummulated from her involvement with children over the years. Moustakas and Schalock (1955) used five subjects in their study, while Finke (1947) used the protocols from six complete studies to devise her scales. Moustakas (1955) investigated nine children in his research, and Hendricks (1972) used ten children in her comprehensive study.

Research on outcome in play therapy has shown great diversity in terms of the number of subjects involved. The smallest study reported used nine subjects (Quattlebaum, 1970) while Wall (1973) used a total of forty-seven subjects. The sample size used in the other studies have included nine subjects (Quattlebaum, 1970), sixteen subjects (Seeman, Barry & Ellinwood, 1964), seventeen subjects (Dorfman, 1958), eighteen subjects (Cox, 1953), twenty-six subjects (Herd, 1969; West, 1969), twenty-seven subjects (Perkins, 1968; Krivy, 1972), and thirty-five subjects (Pelham, 1972).

The subjects have typically been allocated to one of an experimental/treatment or control/no treatment group (Fleming & Snyder, 1947; Cox, 1953; Dorfman, 1958; Seeman et al, 1964; Pelham, 1972; Wall, 1973). In some instances, three groups have been used: a control group, an experimental/treatment group, and a placebo group (Herd, 1969; Quattlebaum, 1970; Krivy, 1972). Perkins (1968) used a control group and two different treatment groups in his comparison of treatment modality effectiveness. West's (1969) research design consisted of three groups: an experimental group, a placebo group, and a deferred group. Rhinard (1970) used two treatment groups only. Siegel's (1971) study consisted of two groups: a primary intervention and a secondary intervention. The secondary intervention group was further subdivided into three different treatment groups. For further clarification and elaboration of the variable of subject number and type of treatment group, refer to Appendix D.

The wide range in terms of size of sample and treatment group size is apparent. Problems have arisen concerning the sample size and various limitations have been pointed out. These have included the criticism that the sample size is too small (Ginott, 1961; Herd, 1969; West, 1969; Quattlebaum, 1970) resulting in either a lack of significant results (West, 1969) or distorted interpretations and sweeping generalizations arising from errors in inference (Chassan, 1960; Pumfrey & Elliott, 1970). Pumfrey further points out major limitations in play therapy research using control groups in terms of the difficulty in matching the subjects, the non-random sample selection, and the non-random allocation to experimental group.

While there are limitations inherent in any types of research design, in order to overcome some of these limitations, the present study relied on the use of an intensive and indepth analysis of two single cases to provide preliminary evidence and to furnish the basis for future investigation.

Rationale for the Use of Single Subject Study

The rationale for the use of a single subject study as a methodological approach to the understanding of behavior has been well defended and will be presented.

In Shapiro's view (1961), there appeared to be no scientific justification for the emphasis on group-centered research. Shapiro emphasized that such a justification would be acceptable only if individual-centered reasearch had been tried on a large scale, and no positive results been obtained. Since no such attempt had been made, Shapiro felt that it was time for the balance to be redressed.

Chassan (1960) agreed that it was difficult to understand why the individual approach had been so completely neglected in formal clinical research. He concluded that the reason for the neglect probably resulted from a "general misunderstanding about the possibilities of the 'much maligned' individual case" (p. 178).

To discover the use made of the single subject study, Dukes (1965) made an intensive review of the psychological periodicals published during 1939 - 1963. A total of 246 N=1 studies were found. Dukes suggested that although considered limited in number, these very examples attested to the importance of single subject studies in the history of psychology.

When should the single subject study be the research approach used? Shontz (1965) states that there are legitimate incidences where the use of the case study method is undoubtedly the most appropriate method and serves the purpose better. The various possibilities listed by Shontz include:

1. the remarkable case
2. exemplifying or illustrating a point of view
3. demonstration of a technique
4. use in surveys where collections of case study materials are used for describing general trends in large groups of subjects
5. establishing a data pool
6. challenging existing modes of thought
7. confirming theories and hypotheses.

Other claims have been made for the use of the single subject methodology. It has been said that "single subjects well understood may prove to be more useful to a science of personality than large groups about whom nothing is known" (Shontz, 1965, p. 85). Shontz further suggests that "as a didactic device in illustrating, exemplifying or demonstrating theories or practices, the case study is obviously unexcelled and will not soon be replaced by any other approach" (Shontz, 1965, p. 81). Dukes (1965) concurs by stating that problem-centered research on one subject only may make substantial contributions to the study of behavior by its clarification of questions, its defining of variables and its indicating of approaches to be used.

In order to preserve some kind of "functional unity" and to clearly and dramatically present a certain point, a researcher may make use of the single subject method in reporting in depth one case which exemplifies many (Dukes, 1965). Shapiro (1961) provides support for this notion in contending that "the discovery of a law affecting the

psychological functioning of a single subject will be confirmed by the observation of many other subjects" (1961, p. 261).

A single case is said to be ideal for long term intensive research in that the long term committment for therapy between the therapist and the child, with the regularity of the therapy sessions, provide the ideal opportunity for the collection of relatively large quantities of data for the testing of hypotheses (Shontz, 1965; Chassan, 1967).

Finally, Shapiro (1964) states that the essential use of the single case methodology lies in the observation of processes and not in the observation of static relationships. Shapiro (1966) later insists that research is unlikely to make important advances in the experimental investigation of process if it does not make use of individual-centered investigation. The present study in its use of the single subject and its focus on process in therapy, was designed to comply with Shapiro's statement.

From the points outlined, it can be concluded with Shapiro (1966) that "despite the meager body of individual-centered research in clinical psychology, one is not entitled to assume that such research (i.e. single subject research) produces results that do not have useful implications and that are not repeatable" (p. 18).

Unique properties characteristic of single subject studies and of merit in psychological research have been pointed out by Lazarus and Davison (1971). They include the following:

1. a case study may cast doubt upon a general theory
2. a case study may provide a valuable heuristic to subsequent and better controlled research
3. a case study may permit the investigation, though poorly controlled, of rare but important phenomena

4. a case study can provide the opportunity to apply principle and notions in entirely new ways
5. a case study can, under certain circumstances, provide enough experimenter control over a phenomena to furnish scientifically acceptable information
6. a case study can assist in placing "meat" on the "theoretical skeleton".

The unique properties of the case study having been discussed, and the typical instances where their use is most appropriate having been outlined, perhaps it would be of benefit to discuss certain conditions necessary for making the use of the case study, with its unique characteristics, of most value.

Shontz (1965) states that perhaps the most important indicator of the value of a case study to research lies in its explicitness. Shontz suggests that a perfect case would presumably record and report, in completely objective fashion, everything a subject does. If that was done, Shontz believes, there would be few arguments about the accuracy of the information collected. The rationale underlying this belief is that "highly explicit data have maximal informational content, and details of the procedure by which they are collected are publishable and repeatable" (Shontz, 1965, p. 77). Thus, according to Shontz, explicit case study data possesses the three essential properties of detail, immediacy, and objectivity. The present case studies were designed to meet these conditions and to fulfill these specified requirements.

The value of the single subject study and the advantages pertaining to its use in fundamental research have been presented throughout the literature. Case studies have frequently been thought of as good preliminary devices in investigations (Shontz, 1965), and also as

generators of hypotheses. Keisler (1971) states that "intensive study of the single case (either controlled or uncontrolled, with or without measurements) is a valuable source of hypotheses for the explanation of human behavior" (p. 66). Chassan (1967) concurs in saying that the single case study permits the valid testing of hypotheses and the "estimation of parameters with far greater precision and flexibility" (p. 174).

It has been suggested that the use of the intensive single subject study which is based on frequent observation of the subject over an extended length of time, is a basic methodological approach which can provide even more meaningful information than that obtained from the extensive study of larger samples (Chassan, 1967). He notes that extensive study of small groups may result in serious errors of inference that would not occur in intensive studies of single cases. Concerning the inferential possibilities of a single subject study, Chassan (1960) states that from a statistical point of view, the intensive single case study "can be considered as providing data sampled from a statistical distribution or population defined by the set of particular parameters or characteristics of the individual under study" (p. 177). Chassan adds that the expectation of a similar result occurring with a second individual will depend on the assumption that the second subject represents a statistical distribution sufficiently similar to the design subject to permit the making of inferences from one to the other.

Another distinct advantage or useful feature of the case study according to Shontz (1965) is that it has the potential for presenting the individual in his full complexity. Shontz sees the single subject

study as capable of "yielding an overall picture of the naturally functioning person that can scarcely be obtained in any other way" (p. 68). He also considers the case study as being rich in speculative possibilities and in suggesting new ideas and offering opportunities for insights that are often ignored by other approaches. He summarizes his defense by stating that, the case study, "if applied properly.... is an invaluable aid to scientific communication, an irreplaceable teaching and illustrative device, and a source of new ideas" (p. 82).

Finally, Shontz feels that the single subject model offers a maximum of flexibility of expression to both observer and subject, and does not impede the "observational and intellectual scope" of the researcher.

Bergin (1971) feels that the case study approach is much more relevant than group studies which are based upon mean comparisons that obscure individual differences. He feels that frequently the observed mean differences in group research arise from a small minority of the subjects involved. Shapiro (1966) states that when change is investigated, the data from a number of subjects cannot be combined. The first step when investigating process according to Shapiro should be the investigation of a number of individual cases. Once an effect is observed in a single case, "the procedure is replicated on equivalent cases and refined further until it is clear what kind of procedure will have certain effects on a specifiable problem or subject type" (Bergin, 1971, p. 255). Then, if a substantial number of adequately understood and properly selected cases can be studied, a series of experimental investigations may be composed and conducted (Shontz, 1965). The continued investigation would not comprise a simple adding together of

all cases which had been treated and evaluated equivalently, as this would cancel out the effects of individual differences (Shapiro, 1964). But it would imply the "studying and treating of individuals as individuals, with the guidance of general theoretical concepts and with an eye to the continued improvement of the empirical applicability of these concepts as more cases are investigated" (Shontz, 1965, p. 72).

Obviously, there are certain inescapable limitations to the single case study approach. It has been argued that case studies often display relatively scant details of procedures and data. As mentioned previously however, Shontz (1965) specifies the conditions of explicitness as necessary to increase the acceptability of the evidence from case studies. He suggests that "any device that collects or conveys information in a standardized and objective way serves the purpose" (p. 77). He gives as examples, a subject's responses to unstructured situations that are directly recorded on tape or sound film, and also sees scores from the components of a battery of psychological tests as being highly explicit.

Another concern with the use of the case study as a methodological approach has to do with the question of bias. Case studies are seen as inevitably biased, no matter how explicit they may be. Shontz (1965) suggests that bias is bound to enter, if not into the collection and interpretation of the data, then into the choice of one particular case or another. While granting that the concern of bias is valid, Shontz feels that bias is not invariably detrimental, and need not be taken as a condemnation of the case study method as a whole. He suggests that the critical concern should relate instead to the question of whether the case study is used appropriately to accomplish the purpose it serves

best.

A further limitation to the use of the case study is that it rarely provides undeniably conclusive evidence (Shontz, 1965). Even in well-executed studies, the lack of rigorous control can leave the study open to question as to the data and the explanation of it. The concern of generalizability of results is of focus here (Shontz, 1965) and this indetermination of the general applicability of the findings is considered to be the main limitation (Dukes, 1965). However, Dukes suggests that even this issue should not be used to dismiss the results of case study investigations as inconsequential. Thus, the argument advanced above regarding the approach of extended investigation involving a number of single case studies to replicate and confirm results found will serve to give support to any predictions made and add credibility to any generalizations drawn.

Certain weaknesses of the single subject study as a methodological approach can hardly be ignored. While the case study method is not suited to every purpose, Shontz (1965) insists that only in more frequent use and publication of the case study will its full potential be judged and its value assessed. Dukes (1965) stated that "regardless of the rationale and despite obvious limitations, the usefulness of the N=1 studies in psychological research seems, from historical and methodological considerations, to be fairly well established" (p. 78). Shapiro (1961) concludes his defense of the single subject study by stating:

> that the clinical psychologist is in his practical work, concerned, albeit in an uncontrolled manner, with the manipulation of psychological disorder in individual subjects. It follows that fundamental research in clinical psychology should be directed at the controlled manipulation of these same phenomena in the same individuals (p. 261).

Despite the limitations of the single subject method as a research procedure, for the purposes of the present study, the single case study method was seen as the most appropriate and viable method.

CHAPTER III

METHODOLOGY

Introduction

The purpose of the present study was to evaluate the effectiveness of play therapy as a treatment modality in an intensive analysis of two single cases.

In order to determine the potential and effectiveness of the therapeutic treatment used in changing the affective, cognitive and psychological process areas, it was necessary to study two components of the therapy system: the process, defined as movement through therapy, and the outcome, defined as the end result of therapy. The investigation of these two components, the process and the outcome, comprised the two phases of the investigation.

Experimental Design

Outcome Component

To investigate the outcome component, the basic experimental design used was that of pre- and post-testing. A battery of standardized tests, selected to assess change in all areas of functioning (i.e. affective, cognitive, and psychological) was administered. Change in performance was assessed in terms of a comparison between pre- and post-therapy tests results. A discussion of the specific tests used follows in the section on collection of data for the outcome component.

Process Component

To investigate the process component, a tri-level hierarchy of play as a system of analysis of the therapeutic process was used.

Movement through the play levels, and the type of play occurring due to direct therapist-child interaction, was hypothesized to be indicative of movement through the therapeutic process.

Treatment Effectiveness

A comparison of subjective reports, objective test scores, and the results of the analyses of the play behavior according to the categorization system devised, would be considered to be an indicator of the relative merits of the therapy itself.

Significant change noted on any particular psychological test used could possible point to its use as being of value in assessing the outcome of therapy. Significant results gained from the use of the play classification scheme would provide a system for monitoring and evaluating the process of therapy. These two components, evaluative outcome measures and a process monitoring system, would be of significant benefit to those individuals in need of guidelines for therapy with young children.

The Subjects

The investigation centered on the indepth analysis of two single subject studies.

The rationale for the use of the single subject study has been covered intensively in Chaper II. Perhaps, at present, the following quote may suffice:

> one might say that the clinical psychologist is in his practical work, concerned, albeit, in an uncontrolled way, with the manipulation of psychological disorder in individual subjects. It follows that fundamental research in clinical psychology should be directed at the controlled manipulation of these same phenomena in the same individual. (Shapiro, 1961, p. 261)

The two children comprising the study were attending a local elementary school. They were referred by the school psychologist. The reason for referral was for suspicion of possible emotional difficulties. It was felt by the school psychologist that not only would individual counselling be beneficial, but that it was also necessary.

Child 1: Chad

Chad is an eight year old male presently in Grade Three. His teacher reported Chad as having inconsistent work habits, doing little if any of the assigned class work, withdrawing from the classroom situation, and frequently day-dreaming. At home, his parents' primary concern was that Chad seemed "unable to express his feelings" and rarely responded with any kind of emotional display. His typical reaction would be to withdraw physically or emotionally from the conflict situation, giving the impression that he was not affected.

Chad has a six year old sister who was described by her mother as being her father's favorite. The sibling relationship was seen by both parents as "normal", with no significant or unusual behavior occurring.

Interviews with the parents and subjective observation of the family and situation gave the therapist the impression of almost hopeless resignation and helplessness on Chad's part in facing the situation of unrealistic parental expectations, and of being over-shadowed by his sister's personality and place in the family. Chad seemed to try to contain all his feelings (in his words, "keeping them in his stomach") and it was felt that the energy expended in concealing his emotions resulted in his typical 'flat affect'.

Child 2: Shauna

Shauna is an eight year old female presently in Grade Two. Shauna

was described by her teacher as having an inconsistent and erratic school performance, and as having frequently occurring episodes of day-dreaming. These episodes were described by the teacher as "blank spaces" where Shauna seemed almost completely oblivious to her surroundings, as if out of direct contact with them.

Her adoptive parents reported no behavioral difficulty at home other than her tendency to sleepwalk. There was no apparent medical reason for the sleepwalking, which was reported to occur on the average of twice a month, having continued over the past two years. However, the sleepwalking incidences, her unsatisfactory performance at school, and the knowledge of a traumatic experience in Shauna's early childhood, were the causes of her parents' concern for her.

Shauna has three adoptive siblings who are actually her cousins: two sisters aged seven and five, and a six year old brother. Her parents report that she is on good terms with each of them.

Interviews with the parents and subjective observations made by the therapist resulted in the impression of genuine concern and care for Shauna on the part of the parents, with indications of some uncertainty as to how to handle her.

Shauna was seen as well established in the family but at times, remaining on the outside of the family circle. She related immediately to the therapist, who gained the impression of an outwardly happy and cooperative child who inwardly seemed to be full of restless energy or emotions.

The Therapist and Therapist Orientation

The researcher was the therapist participating in the study. The

therapist was well acquainted with the use of play therapy with children.

Description of Treatment

Time Span

Child 1 was seen in play therapy for one hour a week for a total of sixteen weeks. Child 2 was seen for forty-five minutes per week, twice weekly for two weeks, then weekly for six weeks, for a total of ten sessions.

Selection of Toys

In the first case studied, use was made of the playroom located in the Clinical Services area. A variety of toys and material having both therapeutic value and interest stimulation, were readily available to the child, and were representative of those recommended by Lebo (1955; 1958) and Ginott (1961). The play material included a sandbox, water play sink, bendable family members, puppets, doll house with furniture, crayons, poster paint and paper, balls, cars, chalkboard, building blocks, puzzles, etc.

In the second case, use was made of a room specially suited to observational studies. No facilities were available for water or sand play but a similar selection of toys were available to the child. A special addition was a Music Center designed by Bishop (1977). This was a sturdy, colorful and mobile boxlike structure containing both radio and tape deck, with the controls of easy access to the child.

Collection of Data: Outcome Component

For the outcome part of the study, data was collected in the form of scores resulting from pre- and post-therapy assessment on various psychological measures. This format has been the usual one in studies concerned with the outcome of play therapy (Fleming & Snyder, 1947; Cox, 1953; Dorfman, 1958; Herd, 1969; West, 1969; Quattlebaum, 1970; Krivy, 1972; Pelham, 1972; Wall, 1973), the rationale being that reliable test improvements do occur concomitantly with a series of therapy sessions (Dorfman, 1958).

Shontz (1965) suggests that the essential merit of most formal psychological tests stems from their generally high level of explicitness. The explicitness (which he suggests is essential to case study in terms of adding credibility to the evidence) he sees as arising from the assumption that trained examiners generally test the subjects in a highly reliable fashion, and record the data with an acceptable degree of accuracy. Shontz points out an advantage of the use of test measures in that "their selection of particular kinds of information for intensive investigation has been publicly explained in previous reports of highly controlled research" (1965, p.80). Thus he feels that the reader of a case study based on test measure data will be familiar already with the procedures used.

Because of the need for more stringent and discriminating criteria of change (Herd, 1969; West, 1969; Pumfrey & Elliott, 1970; McNabb, 1975) an extensive battery of tests was selected, and administered to

each subject. The school psychologist and therapist joined in administering the tests, while both the parents and teachers completed the various checklists.

Tests used included the following:

1. Wechsler Intelligence Scale for Children - Revised (WISC-R)
2. Wide Range Achievement Test (WRAT)
3. Beery Developmental Test of Visual Motor Integration
4. Bristol Social Adjustment Guide (BSAG)
5. Bene-Anthony Family Relations Test
6. Coopersmith Self-Esteem Inventory (SEI)
7. Coopersmith Behavior Rating Form (BRF)
8. Childrens' Apperception Test (CAT)
9. Human Figure Drawing (HFD)
10. Kinetic Family Drawing (KFD)

Reliability and Validity of Measures Used

McNabb (1975) states that the choice of instruments made is critical to the research done, and the selection should be based on an understanding of the validity and reliability of each instrument used. The criteria of reliability and validity will be treated separately for each measure used. For an indication of the criteria for test selection in terms of variables investigated and instrument used, refer to Table 1. An expanded table of the criteria for test selection will be found in Appendix E.

TABLE 1

VARIABLES INVESTIGATED AND TEST INSTRUMENTS USED

Variables Investigated	Instrument Used
Intelligence	Wechsler Intelligence Scale for Children - Revised (WISC-R)
School Achievement	Wide Range Achievement Test (WRAT)
Visual Motor Integration	Beery Developmental Test of Visual Motor Integration
Family Relationships	Bristol Social Adjustment Guide Bene-Anthony Family Relations Test Childrens' Apperception Test Kinetic Family Drawing
Self-Concept	Coopersmith Self-Esteem Inventory Coopersmith Behavior Rating Form Human Figure Drawing

1. Wechsler Intelligence Scale for Children - Revised (WISC-R)

The revised edition of the Wechsler Intelligence Scale for Children - Revised (WISC-R) was used to give a measure of the child's current intellectual capacities. The WISC-R avoids emphasis on any one ability as being crucial, and views intelligence as a multifaceted construct. The scores of the WISC-R yield a pattern of stength and weakness in both a Verbal and Performance area.

The norms were derived from groups of children in the age range of 6 - 0 to 16 - 11, who were selected to be a representative population on the basis of data included in the 1970 United States Census.

The reliability coefficient for the Verbal, Performance and Full Scale IQ scores were obtained by computing the reliability of a composite group of tests. The IQ scores have a high reliability across the entire age range, the average coefficients being .94 for the Verbal IQ score, .90 for the Performance IQ score and .96 for the Full Scale IQ score. The test-retest reliability coefficients for the individual tests are reported as satisfactory, with average coefficients ranging from .77 to .86 for the Verbal tests, and .70 to .85 for the Performance tests.

Congruent validity of the WISC-R was tested by correlating the WISC-R with the Wechsler Preschool and Primary Scale of Intelligence (WPPSI), the Wechsler Adult Intelligence Scale (WAIS), and the Stanford-Binet Intelligence Scale. The correlation between the WISC-R and WPPSI was reported as .80 for both the Verbal and Performance scales, and .82 for the Full Scale. The correlation between the WISC-R and the WAIS was .96, .83, and .95 for the Verbal, Performance and Full Scales, respectively. The average coefficients of correlation of the WISC-R

and Stanford-Binet are .71 for the Verbal IQ, .60 for the Performance IQ and .73 for the Full Scale IQ.

2. Wide Range Achievement Test (WRAT)

The Wide Range Achievement Test (WRAT) taps the three school subject areas of reading, spelling and arithmetic. The WRAT was used as an adjunct to the intelligence test because of its value in the comparison between school achievement and other abilities.

The reliability of the WRAT was established through the split half technique. The correlation coefficients ranged from .92 to .98 for the reading and spelling tests, and from .85 to .92 for the arithmetic test.

The validity of the WRAT was estimated through correlations between WRAT reading test results and external criteria (teachers' ratings); raw scores and chronological age; raw scores, intelligence and educational level; WRAT scores and other achievement tests; inter-correlation between the three WRAT sub-tests; WRAT and intelligence tests; and through factor analysis. Correlational data from combinations reported above indicated that the WRAT appears to have adequate concurrent validity in the areas it purports to measure.

3. Beery Developmental Test of Visual Motor Integration

This tests consists of 24 geometric forms that are to be copied. The geometric forms are arranged in order of increasing difficulty. The test is designed to detect problems in visual motor integration.

The evidence reported for the validity of the Beery Test was a correlation of .89 between test scores and chronological age. Inter-judge reliability with two judges and a sample of 70 was reported as .98. Two week test - retest reliability on a sample of 171 rural children was .83 for boys and .87 for girls.

4. Bristol Social Adjustment Guides (BSAG)

The 'Child in the Family' Guide was used in this study. The Guide consists of a checklist of statements descriptive of parent-child relationships and types of family situations.

As yet, there is no comprehensive standardization of the Guides on a randomized sample. The reliability of the "Child in the Family" edition has not been reported but in a preliminary study on the 'Child in the Day School' edition, the reliability of interrater agreement was .76.

Validity for the 'Child in the Day School' edition was estimated through studies correlating findings from the Guide with teacher assessment, sociometric status, and educational attainment. Petrie (in Stott, 1974) suggested that while the reliability and validity of the BSAG were "moderately good", the value of the instrument lies in its means of assessing the effects of treatment.

5. Bene-Anthony Family Relations Test

This test permits the child to express his emotional attitudes towards the members of his family, and the attitudes he believes the family members have towards him. The test consists of small cards and boxes that are attached to cardboard figures representative of family members. The cards contain statements of emotional feelings and attitudes. The child places the cards into the box of the family member for which the statement is most appropriate according to his perception of the family relationships.

The norms for the Family Relations Test were established on a population of children referred for child guidance. The reliability

coefficients ranged from .68 to .90 and were obtained through the modified split half method.

Reasonable confidence can be placed in the construct validity of the Test which was obtained from comparisons between test results and case history material, and tests results and data from a questionnaire for mothers (Bene and Anthony, 1957).

6. Coopersmith Self-Esteem Inventory (SEI)

This self-administering scale measures evaluative attitudes towards the self in the domain of peers, parents, school, and personal interests. The scale operates on the premise that self-esteem is associated with personal satisfaction and effective functioning. The inventory consists of 58 statements relating to the areas of self-esteem, which the child marks as being "like" or "unlike" himself.

Test - retest reliability was obtained on a sample of 30 fifth graders and was reported as .88 over 5 weeks and .70 over three years.

No systematic validation of the scale has been carried out, however, Coopersmith (1967) mentions that cross validating studies with the WISC, Rorschach, Thematic Apperception Test, Figure Drawing Test and Sentence Completion Test have been attempted. The results of these studies were not reported.

7. Coopersmith Behavior Rating Form (BRF)

The Behavior Rating Form consists of a 14 item, five point scale of behaviors related to self-esteem. The items refer to behaviors such as the child's reactions to failure, self-confidence, sociability with peers and need for encouragement and reassurance.

Inter-rater reliability was established on a sample of 71 elementary school children. The coefficient was found to be .73 (Coopersmith,

1967).

The behaviors comprising the checklist were assumed to be valid manifestations of the child's self appraisal as they were selected after a series of observations of child behavior, and repeated discussion with teachers, principals and psychologists.

8. Children's Apperception Test (CAT)

In this projective test, the child is presented with a series of ten picture cards and asked to tell a story about each one. The pictures consist of animal figures, on the premise that children identify themselves more easily with animals than with persons. Themes dealt with by the pictures include the most common problems of childhood, such as sibling rivalry, feeding conflicts, aggression, etc.

The rationale behind the use of projectives as a testing technique lies in the assumption that in relating about ambiguous stimuli, the subject is encouraged and induced to project his own personality characteristics.

Since the projective test is a method of investigating personality by studying the meaningfulness of the individual's perception of the stimuli, the individual case can stand by itself (Bellak & Bellak, 1974). Thus, there is no need for validation and establishment of norms, because "the data of manifest behavior are compared with those of the unconscious tendencies of the same individual" (Bellak & Bellak, 1974, p. 15). It is felt that the clinical insights gained by the use of projective techniques outweigh the disadvantages due to a general lack of reliability and validity. Ideally, no projective test is used in isolation, but as one of a number of approaches and in conjunction with other test measures.

9. Human Figure Drawing (HFD)

The Human Figure Drawing Test (HFD) was used in preference to Machover's (1948) Draw-A-Man Test because Machover offers no scoring system and no controlled research data. However, the HFD Test has been intensively and systematically investigated by Koppitz (1964) who offers a standardized scoring system and supportative research data.

The HFD Test as defined by Koppitz (1964) requires that the child draw a whole person. The choice of the age and sex of the figure drawn is left to the child. The test has both developmental and projective significance, but for the purpose of the present study was used as a projective method. As such, objective signs of emotional indicators reflective of the child's attitudes towards self and significant others, and his present fears and anxieties, can be found.

Inter-rater reliability for the emotional indicators was established through the scoring of 25 protocols of a random selection of children in the second grade, and children referred for behavior problems. There was almost perfect agreement between the two raters on the scoring of the drawings.

The criterion for clinical validity was defined as the ability of the signs designated as emotional indicators, to differentiate between the HFDs of clinic referrals and well adjusted students. The findings of the study of the HFDs of 76 matched pairs of children aged five through twelve (one member of the pair rated by teachers as adjusted, the other a clinic referral) showed a significantly greater number of emotional indicators present in the drawings of the clinic subjects. Sixteen of the emotional indicators were found exclusively on the HFDs of clinic subjects.

10. Kinetic Family Drawings (KFD)

This projective test devised by Burns and Kaufman (1970) attempts to understand the dynamics of the child's family situation through an analysis of his kinetic family drawings. The child is instructed to "draw a picture of everyone in your family, including you, doing something". It is felt that the action (kinetic) approach results in less rigid and static drawing, and produces more valid and dynamic material.

No studies on the validity and reliability of Kinetic Family Drawings have been reported, but the writer feels that results from the KFD assessment yield valuable clinical information that can be used in conjunction with other psychological measures.

Analysis of Data: Outcome Component

Analysis of the outcome data took the form of indepth analysis of the single cases in terms of the comparison, interpretation and discussion of pre- and post-test scores and results.

In terms of the comparison and interpretation of the pre- and post-test results, to avoid bias arising naturally from the dual position of therapist-test interpreter, the sets of pre- and post-test data were given to two psychologists to interpret independently. Both psychologists were experienced in the administration and interpretation procedures of standardized and projective testing. Experienced interpreters were used on the assumption that maximum reliability of test interpretation would be obtained. To give further credibility to the interpreters' reports, the pre- and post data were not designated as such, in order to avoid bias arising from expectations of change due

to the effect of treatment.

Collection of Data: Process Component

In both cases, collection of data on the play rating system was facilitated through the use and analysis of video taped records. A rationale for the use of the VTR has been developed and will be presented. A description of the play rating scale and its system of analysis will follow.

Rationale for the use of VTR as a method of Data Collection

An obstacle to research has been the problem of obtaining permanent records of the behavior to be observed. Recording methods of the majority of observational studies have typically been those of written or dictated accounts (Wright, 1960). While Ginott (1961) clearly outlined the limitations of the use of verbatim records of play sessions in identifying the stages of process, much of the research in play therapy to date has depended on the verbal type of data recording (Landisberg & Snyder, 1946; Finke, 1947; Axline, 1950; Lebo, 1953; Moustakas, 1955; Rogers, 1969).

Recently, advances in electronic recording devices, in particular, in the use of video taping procedures have provided the methodological means of enhancing observational studies, and have greatly improved the attempts to obtain quantitative data (Strupp, 1971). However, no studies have been reported in play therapy that have taken advantage of video taping procedures in collecting data for purposes of identifying and analyzing process and outcome. Even in the most recent and comprehensive investigation of the play therapy process (Hendricks, 1972), the subjects were viewed through a one way window and the sessions were

audio recorded. The results and conclusions of the study were based on verbatim notes of verbal comments and descriptive records of play activities and non-verbal behavior. The use of video taping procedures would have made the description more explicit and in turn, possibly strengthened the credibility of the evidence.

Video tape recording offers several useful features. Haworth and Menolascino (1967) in describing their use of the video taping of the behavior of disturbed children found that the video taped observations provided the opportunity for the immediate and repeated viewing of the same play sequence. This would obviously increase the chances of accurate observer rating as the observers would have unlimited opportunities to decide upon the qualitative categorization of the unit of play behavior (Noble, 1972).

In terms of the collection of data, Shontz (1965) suggests that video tape recording, although not perfect, should be used specifically in a case study to provide maximum detail, immediacy and objectivity of the researcher's observations. Then, with the collection of data made more precise (Bergin, 1971), the process of data analysis would be greatly facilitated through the added objectivity and quantitative accuracy (Lazarus & Davison, 1971).

A further advantage is that data is more likely to be obtained on a full range of the interpersonal transactions of the individual involved. Also, a continuous account of the behaviors can provide contextual and sequential information.

The advantages of permanent video taped records in terms of the training of therapists are numerous: potential therapists could acquire skill in the interpreting and recording of the conditions and process of

play therapy through studying the video tapes of therapy sessions. Retrievable examples of interaction and behaviors would be available for study. Also, video taped records permit much flexibility in terms of looking at the behaviors and transactions from a number of theoretical positions or points of view (Noble, 1972).

Video taping procedures are not without disadvantages. The camera equipment, if not hidden behind one way mirrors can prove distracting, however, Cline (1972) contended that after the initial interest, the novelty soon wore off. Lack of manoeuvriability of the camera equipment and a possibly limited field of vision can result in occasional periods when the subjects will be obscured, and the interaction unrecorded. Finally, extraction of the data can be a lengthy process, but this difficulty can be partly overcome through the simplicity of the classification scheme to be used.

Because of the potential of video taping procedures in terms of the documentation of the process of therapy and the advantages in data analysis, video equipment was used in the present study to record and collect the data.

The Play Rating Scale

The play rating scale used in the present study, was devised by Bishop (1976). The purpose of its initial use was to study child care programs in terms of the quality and nature of the child's interaction with toy materials and equipment within the program environment.

The system devised is a tri-level hierarchical system for rating play activities. The levels represent the quality of the child's interaction with toy materials, with increasing degrees in the quality of the play corresponding to the hierarchical organization of the three

levels.

Bishop (1976) states that four "dimensions of quality" are considered in the construction and definition of the play levels. The four dimensions represent the amount of the child's investment in the play activity, and include the degree of attention, the scope of attention, the presence of a play theme embodying some aspect of social living (Bishop, 1972) and the child's modification of time and space.

Briefly described, the degree of attention refers to the degree of purpose shown in the play activity, whether the child is acting in an aimless manner (such as kicking a block, or flipping the pages of a book), or whether he is acting toward the attainment of a goal (building a house with blocks, reading a book). The scope of attention refers to the degree to which the child is involved in his play activity, and takes into account body activities, verbalizations, and emotions displayed. The presence of a theme dimension in the play interactions form a related sequence. The sequential actions indicate the development of a particular idea or theme which can be defined in terms of a label, for example, 'playing cowboys and Indians', 'staging the Indianapolis 500'. The fourth dimension, the child's modification of time and space, refers to those activities in which the child goes beyond the realities and limitations imposed by natural laws. For example, riding a broomstick becomes riding a horse to the child as he gallops off as both horse and rider, leaping the 'stream' as he heads toward his 'ranch'. Perhaps a classic example of the fourth dimension would be that as typified by Ben Johnson in Tom Sawyer. In this instance, Ben, as the steamboat Annie, carefully 'chugs' his way toward Tom Sawyer, at the same time giving orders as 'the captain', and

squealing with delight as 'the passengers'.

Increasing degrees of the four qualities, with increasing degrees of investment in the play activities, characterize the hierarchical arrangement of the three play levels. Level I play is the least complex and is basically sensorimotor. The child engages in what is described as "possession and release behavior" (Bishop, 1976). The child shows little involvement with the toy object and no interest in its properties. For example, the child wanders aimlessly, picking up a toy only to drop it for another. Or, the child purposelessly kicks at objects on the floor or ruffles the pages of a book.

Level II play, which is basically a perceptual level of play, is represented by activities in which the properties of the toy object are focused on, but with no discernible theme. The child shows more involvement with the toy object but is concerned primarily with its properties rather than its use. For example, a child will turn a flashlight on and off and will attend to the flashing of the light, or, will make random sketch marks with a new pen.

Level III is the most complex level of play in the rating system. Basically a conceptual level of play, it is characterized by "thematic and sequential" dimensions of play. That is, the play activities are related in a sequential order and are intended to accomplish a particular experiential effect. A theme is evident, and the child is heavily involved in the play. For example, a child proudly paints a picture of his trip to the zoo; or, two children, with the use of walkie talkies, stage and enact a cops and robbers street scene in which each child is at one and the same time 'the police inspector', 'police officer' and 'squad car' racing through 'narrow streets' and 'busy intersections'.

What then is the relationship between the tri-level play classification system, and a play therapy paradigm? In terms of providing a model for the use of play in counselling, Bishop (1972) first suggests that play provides a systematic representation of the events in the child's life. Experiencing the representations of real life in play frees the child to rehearse, improvise and modify his present coping strategies as well as to learn new or alternate solutions to life events. Play is characterized by the three levels of play activity, and generally progresses through the sensorimotor, perceptual and conceptual levels. Theoretically, the conceptual level is the most complex and is characterized by the formation and learning of rules which govern the acquisition of skills necessary to function adaptively and effectively within the environment. These rules are transferable to settings outside the counselling situation and are generalizable, serving to allow effective functioning in similar events.

Children in play therapy are typically those who have not learned the rules of social exchange, who have established ineffective coping strategies through the misrepresentation of life events. It seems logical then that an understanding of the levels at which the child is functioning as evidenced by the representations shown in his play, would enable the therapist to more effectively structure the therapy. That is, to match his methods of help to the procedures the child uses in his play. As well, alternate modes of functioning could be introduced. Thus, the purpose of structuring the therapy would be to attempt to enhance the quality of the child's representations by helping him to broaden his ways of behaving so as to include activities which are sensorimotor, perceptual and conceptual. Attaining the more complex

rule-governed conceptual level would allow for transference and generalization of the learned coping strategies. The conceptual level is built on and encompasses the sensorimotor and perceptual levels, thus a balance between the three levels would serve the most adaptive purpose in reflecting flexibility in mode of functioning in different situations.

To summarize, in therapy, the child is encouraged to actively engage in manipulating the objects in his environment, to attend to their properties, and to invest in sequential actions characterized by themes which embody some aspect of the child's social living. The therapist facilitates the expression of the child's symbolic representations and encourages modifications of them in ways complimentary to the child's home and school environment.

In reorganizing and integrating the representations of the situations existing in his world, the child displays the three types of play behavior described, the sensorimotor, perceptual and conceptual levels (Bishop, 1972). These three behaviors, arranged in hierarchical order according to the quality of the play, comprise the play rating system.

The purpose in using the scale was to discover if the quality of the child's representations was enhanced as a result of therapist-child interaction, and the child's increasing ability to discover new coping strategies. Also to be investigated was the level of play exhibited at different stages in therapy.

An advantage of the use of this particular play rating system lay in its yielding of quantitative data, based on readily observable and visually distinctive units of play activity. Thus the scale is quick, efficient and simple to use as a monitoring device. The scale is based

on the child's play activities with objects, which counteracts the general criticism that present play therapy classification schemes take into account the child's verbalizations only. More specifically, in focusing on the effectiveness of the child's representations, the scale includes motor and perceptual acts as relevant material in the counselling process. The scale captures the psychological world of the child without being interpretive or reductionistic. That is, the integrity of the child's play activities is allowed, without being interpreted in terms of psychological functioning, or reduced to a psychological label.

Collection of Data

The play therapy sessions for each subject were recorded on video tape. The video tapes were organized sequentially, and kept until termination of treatment. Since it was felt that movement through therapy would be discernible from an investigation of the initial to middle and final stages of therapy, two tapes for each subject from each of the therapy stages were selected to be analyzed. A total of 12 video tapes, six per subject were thus chosen. From each of the 12 video tapes, a 15 minute segment was randomly designated to be rated. The segments were then coded and put in random sequence for rating, to prevent bias arising from expectation of change due to the natural course of therapy.

The raters involved in the study were university students who had been trained in the use of the play rating scale. The raters had had previous experience with the rating system, were skilled in its use, and had established a high degree of inter-rater reliability previous to this study. Since the tape segments for rating were randomly ordered,

the raters were unaware as to which stage of therapy the segments corresponded to. As well, the raters had no prior knowledge of the purpose of the study, the nature of the therapy conditions, or the status of the child under observation.

A scoring sheet was devised in which the level of the child's play could be rated every 15 seconds for each 15 minute segment of video tape. A total of 60 ratings was made for each 15 minute segment. Thus a total of 360 ratings for each subject was obtained. Inter-rater reliability was computed by the formula:

$$\frac{\text{total scores agreed - total scores disagreed}}{\text{total scorings}} \times 100.$$

Inter-rater reliability was found to be .98.

Analysis of Process Data

The results of the rating of the video tape segments according to the play rating system were tabulated in terms of a frequency distribution of scores obtained for each play level at different stages in therapy. The distribution of scores were charted and graphed to aid in comparison purposes, and to illustrate graphically any trends or patterns in the levels of play activities that may have occurred.

Since play activities are not discrete units of behavior, one leading into the next which sets off another, it is difficult to analyze the data by comparing the play levels in terms of proportions to each other or, to a total. However, it is possible to examine the results by comparing the frequencies of the three play levels at different stages of therapy, the percentages of each play level engaged in at different stages in therapy, and the ranges between the play levels at the designated time points in therapy. These methods of examing the scores will be discussed for each of the individual cases studied.

CHAPTER IV

RESULTS AND DISCUSSION

The outcome and process components to the present study will be dealt with in separate sections. The results of each component will be presented, followed by a discussion of the results.

Results of the Outcome Component

The results of the outcome component of the study are comprised of test measurement scores. Those results will be discussed in terms of quantitative and qualitative changes recorded in specific pre- and post-test scores and results. The test interpreters' reports on the efficacy of each test instrument in detecting change will be noted. A discussion will conclude the section and will attempt to relate the most significant gains illustrated by the test scores, to possible effects of and implications for play therapy.

Consideration of the degree of significance that can be attached to change in any one test score, necessarily involves a knowledge of the interval between dates of test and retest administration. These dates are found in Table 2 for Chad and Table 3 for Shauna.

TABLE 2

Chad: Test and Retest Interval

Chad			
Test Instrument	Test Administration Pre-	Post-	Time Span Between Testings
WISC-R	Nov. '75	May '77	18 months
WRAT	Nov. '75	April '77	17 months
Beery	April '76	April '77	12 months
BSAG	Nov. '76	June '77	7 months
FRT	Nov. '76	May '77	6 months
SEI	Nov. '76	May '77	6 months
BRF	Nov. '76	April '77	5 months
CAT	Oct. '76	May '77	7 months
HFD	Oct. '76	May '77	7 months
KFD	Oct. '76	May '77	7 months

TABLE 3

Shauna: Test and Retest Interval

Shauna			
Test Instrument	Test Administration Pre-	Post-	Time Span Between Testings
WISC-R	Feb. '77	June '77	5 months
WRAT	April '77	June '77	3 months
Beery	April '77	June '77	3 months
BSAG	April '77	June '77	3 months
FRT	April '77	June '77	3 months
SEI	April '77	June '77	3 months
BRF	April '77	June '77	3 months
CAT	April '77	June '77	3 months
HFD	April '77	June '77	3 months
KFD	April '77	June '77	3 months

A comparison of the results obtained from pre- and post-testing on five test measures is presented in Table 4.

TABLE 4

Comparison of Pre- and Post-Test Results on Five Test Measures

Chad			Shauna		
WISC-R	Pre-	Post-	WISC-R	Pre-	Post-
Verbal IQ	103	102	Verbal IQ	78	81
Performance IQ	109	109	Performance IQ	86	102*
Full Scale IQ	107	105	Full Scale IQ	80	90
Object Assembly	9	15*	Object Assembly	6	10*
Similarities	8	12*	Coding	8	13*
Beery	Pre-	Post-	Beery	Pre-	Post-
VMI Age Equivalent	6-10	10-11	VMI Age Equivalent	6-7	8-8
CA	7-9	8-10	CA	7-11	8-1
Pre: 11 months below CA Post: 25 months above CA (36 months increase)*			Pre: 16 months below CA Post: 7 months above CA (23 months increase)*		
WRAT	Grade Level Pre-	Grade Level Post-	WRAT	Grade Level Pre-	Grade Level Post-
Reading	3.5	3.6	Reading	2.6	3.0
Arithmetic	1.6	3.2	Arithmetic	2.8	2.8
(significant increase in Arithmetic score)*			(no significant increase)		
Self-Esteem Inventory			Self-Esteem Inventory		
M = 70 SD = 14			M = 72 SD = 13		
	Pre-	Post-		Pre-	Post-
Self-Esteem Score	80	80	Self-Esteem Score	62	76
(no significant change)			(increase in score by 1 SD) (significant positive change)*		
Behavior Rating Scale			Behavior Rating Scale		
M = 65 SD = 16			M = 61 SD = 14		
	Pre-	Post-		Pre-	Post-
Teacher #1: Chad's self-esteem behavior score	66	76	Teacher #1: Shauna's self-esteem behavior score	58	60
Teacher #2: Chad's self-esteem behavior score	54	74	(no significant change)		
(increase in score (Teacher #2) by 1 SD) (significant positive change)*					

Those tests depicting evident changes in pre- to post-test scores will be discussed individually.

Tests Administered and Change Noted

1. Wechsler Intelligence Scale for Children-Revised

Significant positive change was noted in the test scores obtained by both subjects on the Object Assembly subtest of the WISC-R. This particular subtest is a measure of visual motor coordination and perceptual organization ability (Sattler, 1974). The test requires that motor activity be guided by visual perception and sensorimotor feedback (Sattler, 1974). Patience, perseverance and confidence are required factors for the Object Assembly subtest (Carlson, 1973).

Individually, Chad showed significant gains in abstract concept formation relative to his own standing in pre-testing.

Shauna showed significant improvement in the non-verbal subtests, which reflected in the Full Scale IQ score. The increase is consistent with the improvement shown in visual motor coordination as indicated by the Beery Developmental Test of Visual Motor Integration. Shauna also demonstrated important gains in the Coding subtest. This test appears to measure visual motor coordination and speed of mental operation; "success depends on visual activity and motor activity" (Sattler, 1974, p. 187). A motivational component appears to be contained within the Coding subtest.

2. Beery Test of Visual Motor Integration

In both cases, dramatic improvement was shown in the results of pre- and post-testing. Chad showed an increase of three years according to the visual motor integration age equivalent, while Shauna showed an increase of two years.

3. Wide Range Achievement Test

A significant increase was shown in Chad's Arithmetic score in post-testing. Shauna showed no quantitative gains in the Arithmetic subtest.

Arithmetic involves concentration abilities and an active application of selected skills to cope with new and unique situations (Sattler, 1974). Difficulty in learning math can result from a deficiency in visual spatial organization and integration, and a poor math score can indicate a lack of self confidence and emotional disruption of the thinking processes (Carlson, 1973).

4. Self-Esteem Inventory

Although no significant change was apparent in terms of means and standard deviations in Chad's score on the SEI, the test was of some value in terms of changes in responses to specific questions. For example, the item "I'm easy to like" changed from the pre-test response of "unlike me" to "like me" at post-testing. The item "no one pays much attention to me at home" also changed from "like me" to "unlike me". Qualitatively, Chad's responses to the items appear to indicate a shift to presenting himself in a more positive light, and seem to indicate positive change within the home environment.

Although significant positive change was indicated by Shauna's test scores, the answers to the items seem inconsistent and suggest questionable comprehension of the test items. For example, from post-testing Shauna doesn't find it hard to talk in front of the class but doesn't like to be called on in class; things are no longer mixed up in her life but things usually do bother her.

5. Behavior Rating Form

While significant change was demonstrated quantitatively by Chad's test scores, a qualitative analysis of the test items appears to yield more relevant data. Chad is reported to have acquired a strong sense of self-esteem following treatment, and is rated as being more adaptive in social situation, more expressive and more confident and self-accepting.

Little qualitative or quantitative change is noted on Shauna's results.

6. Family Relations Test

The results of testing with the Family Relations Test for each case was considered to be of value. The results of pre- and post-testing are presented in Figures 1 and 2.

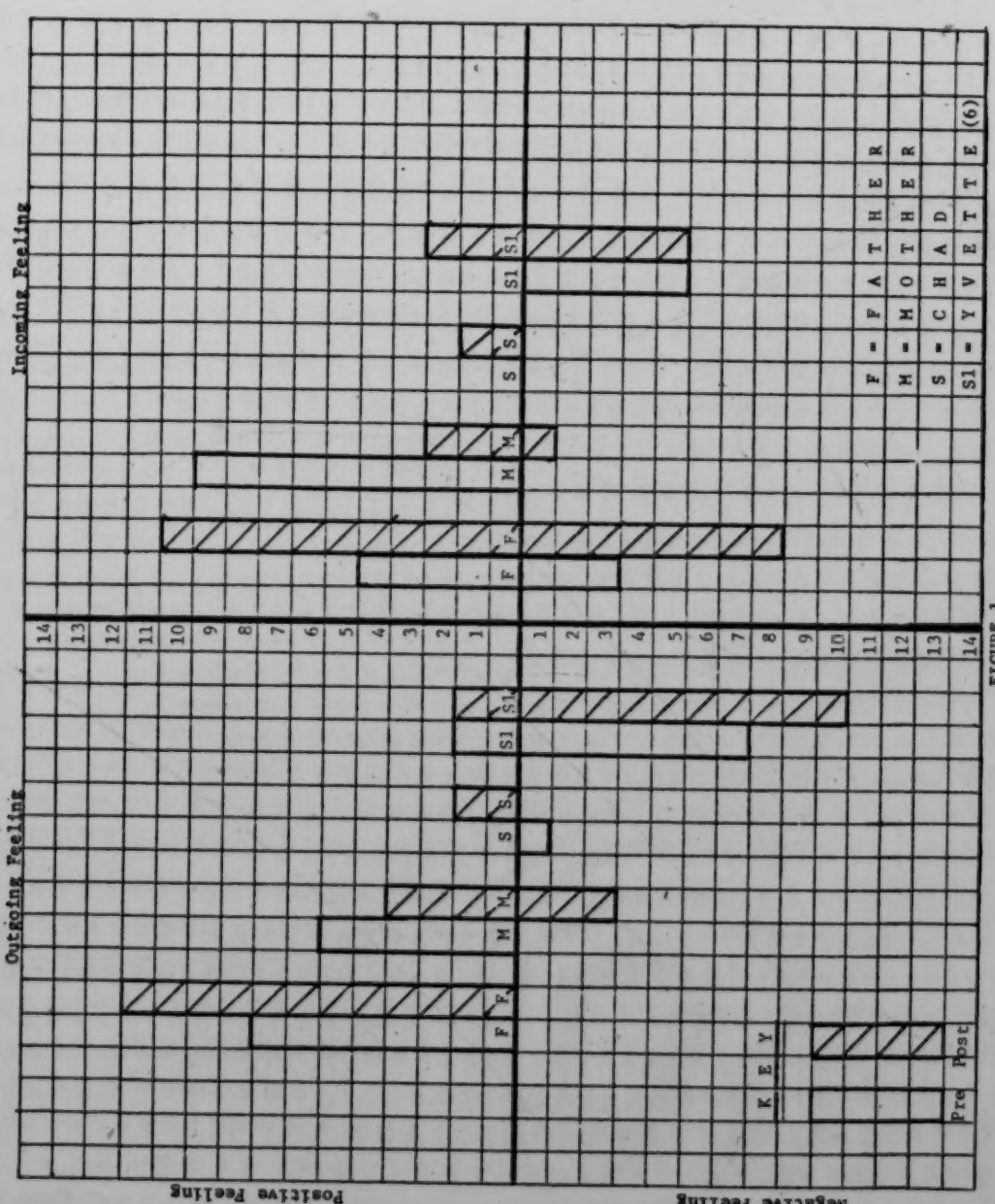

FIGURE 1

CHAD: A Comparison of Pre- and Post- Test Results on the Family Relations Test

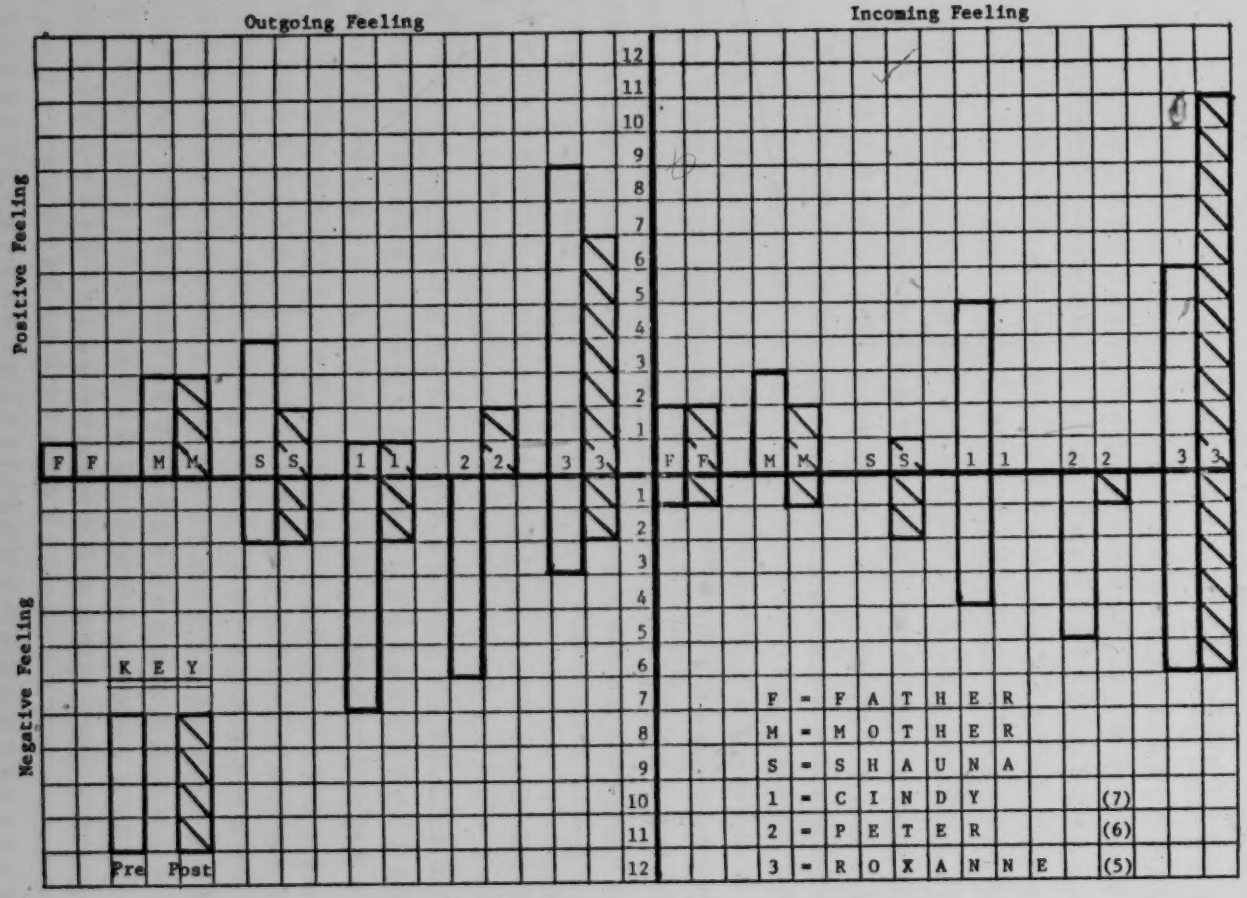
Outgoing Feeling
Incoming Feeling
Positive Feeling
Negative Feeling
F F M M S S 1 1 2 2 3 3
F F M M S S 1 1 2 2 3 3
KEY
Pre Post
F - FATHER
M - MOTHER
S - SHAUNA
1 - CINDY (7)
2 - PETER (6)
3 - ROXANNE (5)

FIGURE 2

SHAUNA: A Comparison of Pre- and Post-Test Results on the Family Relations Test

A definite shift in each child's assessment of his family relationships is revealed, with demonstrable changes in the affiliation with individual family members being evident. A greater range of both negative and positive feelings appears evident, and is perhaps indicative of greater emotional flexibility and awareness.

Specifically, for Chad in pre-testing, the amount of involvement shown in order of decreasing involvement was Mother, Father, sibling and self. Prior to treatment, this order had shifted to Father, sibling, Mother, self. Initially, Chad believed he was receiving positive feeling from Mother only; from post-testing, Chad was receiving ambivalent (i.e. both positive and negative) feeling from both Father and sibling. Initially Chad appeared to be receiving negative feelings from both himself and his sister while in post-testing he did not appear to receive negative feeling from anyone. On post-testing Chad appears to be less inhibited in expressing both negative and positive feelings and appears to have shown an increase in the number of feelings expressed.

For Shauna, change demonstrated was not as marked as that found in Chad's case. However, change was shown in terms of affiliation with significant others: members receiving mainly positive feelings changed from Mother and Sibling 3 to Mother and Siblings 2 and 3. Members who Shauna felt were ambivalent towards her in pre-testing were Father and Siblings 1 and 3. On post-testing these members were Father and herself. The extent of negative feelings, both outgoing and incoming, appears to be markedly diminished.

7. Childrens' Apperception Test

Chad's responses to the CAT reflected logical stories suiting the picture content in both pre- and post-testing. His pre-test responses indicated little expressions of affect, and outcomes to the stories seemed missing. Post-test responses showed an increase in expression of affect, the stories were completed as to outcome, and there appeared to be signs of a need for comfort and protection with fears being expressed more openly.

Shauna's pre-test responses to the CAT were very limited as her language usage was very poor. She frequently described the picture but gave no story, and few feelings. Her post-test responses were longer and more complete and often contained elaborate fantasies (ghosts and wild animals). Her responses tended to be less inhibited, there seemed to be much more expression of affect and of both positive and negative feelings. She seemed to be disclosing more of her own personal "thought world".

8. Human Figure Drawing Test

Little significance was noted relative to Chad's Human Figure Drawings other than an appearance of a lesser degree of pressure and shading on the post-test drawing which could be suggestive of a decrease in tension and anxiety.

In Shauna's case the difference between the drawings was a little more distinct. Initially, when asked to draw a person, Shauna drew her entire family, and as identical figures. This could suggest some difficulty in differentiating herself from her family. When the instructions of drawing a person were repeated, Shauna drew a person who she stated represented her (favored) sister. This could be indicative of a

desire to be like her sister, who is depicted as happy and contented. Shauna's post-test drawings, even though seeming to express feelings of inadequacy and insignificance, had changed to be a picture of her 'self', perhaps indicative of growing feelings of 'self'-awareness.

9. Kinetic Family Drawings

In Chad's pre-test drawing, the Father and son are depicted as being engaged in a mutual activity (conducting safety patrol). Mother and sibling are engaged in independent activities and are larger figures, seeming to be more significant. In the post-test drawing, the dynamics appear to have shifted: Father and son are depicted as big and strong, and engaged in a competition (Tug of War) against the smaller and weaker looking Mother and sister.

Shauna's pre-test drawing is suggestive of possible sibling rivalry. The family appears split into alliances, with little overall unity. On post-testing, the alliances while still evident, have changed somewhat: Shauna is depicted engaged in an activity with her Father instead of with her favored sister.

10. Bristol Social Adjustment Guide

Both reviewers found this particular test instrument to be of little value in assessing change from pre- to post-therapy testing. Criticisms directed against the scale consist mainly of possible distortions in the objectivity of the ratings due to parental bias. The scale is viewed as tending to promote "socially desirable" response sets on the part of the respondents. Objections were raised against the use of obsolete or colloquial terms (for example, "large council estate", "you daren't cross him"). There appears to be little leeway between positive or acceptable responses, and undesirable responses.

For example, responses to the item "mother's appearance" consists of the choices of "tidy/overdressed, over made-up/neglected, dirty/listless, worn-out, usually smoking/very old considering age of child".

The reports from the two reviewers were fairly consistent in their quantitative and qualitative interpretations of the test scores and results. The reviewers concurred in the view that therapy had played a part in effecting change in a positive direction, and that this change was detected and measured by a battery of test instruments encompassing cognitive, emotional and social aspects of functioning.

Of noteworthy value in regarding the efficacy of the individual test instruments, not only in the detection and measurement of change, but also in the providing of salient information, is the rating given the individual tests by the test interpreters. The degree of value assigned to each test is reported in Table 5.

TABLE 5

The Efficacy and Value of Each Test Instrument as Rated by the Test Intrepreters

Psychologist #1		Psychologist #2	
WISC-R: provides the framework for all other test results		WISC-R: provides the framework for all other test results	
WRAT: results suspect		WRAT: of value in conjunction with WISC-R results	
Beery VMI Test: standard instrument for assessing visual motor difficulties		Beery VMI Test: detection of developmental changes	
Family Relations Test	****	****	Family Relations Test
Behavior Rating Form	***	**	Behavior Rating Form
Self Esteem Inventory	**	**	Self Esteem Inventory
Childrens' Apperception Test	*	**	Childrens' Apperception Test
Human Figure Drawing	*	*	Human Figure Drawing
Kinetic Family Drawing	*	*	Kinetic Family Drawing
Bristol Social Adjustment Guide	-	-	Bristol Social Adjustment Guide

Discussion: Outcome Component

Introduction

This section will attempt to provide tentative hypotheses regarding the significance of and relation between the most dramatic increases shown in the test scores, with implications for play therapy being discussed.

Tests Indicating Change

That significant and notable change was recorded on a variety of test instruments for each child over the course of therapy appears evident. To what degree these changes reflect the effects of the child's progress through therapy itself can naturally be open to question, and definitive statements to this end cannot be made without reservation. However, it seems reasonable to hold the view that therapy played a part in effecting change in a positive direction, and that this change was detected and measured by a battery of test instruments encompassing cognitive, emotional, and social aspects of functioning.

Perhaps the view that social and emotional gains occurred as a result of therapy is more readily accepted than is the view of gains occurring in cognitive abilities. Gains in the areas of social and emotional functioning following treatment have been substantiated by various researchers using a variety of test instruments (Cox, 1953; Dorfman, 1958; Seeman, Barry & Ellinwood, 1964; Herd, 1969; West, 1969; Quattlebaum, 1970; Pelham, 1972; Krivy, 1972; Wall, 1973). However, few studies have attempted to assess changes in cognitive functioning as a consequence of undergoing play therapy. West (1969) and Herd (1969) used cognitive measures to investigate the relationship of play therapy

to a more adequate use of intellectual capacities. While little statistical significance was found to support the hypothesis, non-statistical evidence in the form of interviews from parents and teachers tended to support the hypothesis. The test measures used were cited to be possibly insensitive and inadequate in detecting change. Thus few, if any studies, have attempted to relate cognitive gains and play therapy treatment, or, to offer hypotheses as to whether such change is possible, or even probable.

In terms of the findings of the present study the most significant improvements noted were gained on three test instruments having a strong element in common. The purpose of this section is to attempt to stimulate further thinking by offering tentative hypotheses as to possible effects of play therapy treatment in influencing change on those particular tests.

Nature of the Element Common to the Tests: Perceptual Factor

The most significant gains in pre- and post-test scores occurred on the Object Assembly Subtest of the WISC-R, the Arithmetic section of the WRAT, and the Beery Developmental Test of Visual Motor Integration. That these tests showed the greatest amount of change is curious, and invites speculation as to possible reasons for the large increment.

Before attempting to account for those factors which may have contributed to the differences noted, the strong similar element contained within each of the three tests specified will be elaborated. The most obvious factors to which the change could be attributed to will then be considered, followed by a suggestion of the possible role play therapy may have had in effecting change.

The element common to the three tests (the Object Assembly subtest of the WISC-R, the Beery VMI Test, and the Arithmetic subtest of the WRAT) is the primary emphasis on perceptual or visual-motor organization and processes.

Visual organization consists of integrating parts into meaningful patterns (Carlson, 1973). Ross (1959, in Sattler, 1974) defines integration as the ability to combine and relate discrete cues in aspects of the environment, and suggests that integration is a function of the cerebral cortex. Defects in integration may be revealed by the Object Assembly subtest, the Arithmetic subtest, and the Beery VMI Test in that each test calls for the integrative process (Sattler, 1974; Carlson, 1973).

The Object Assembly subtest is a measure of visual motor coordination and perceptaul organization ability, and requires that motor activity be guided by visual perception and sensorimotor feedback (Sattler, 1974). Beery (1967), in defending his rationale for the use of the VMI Test, stated that substantial research indicated that the reproduction of geometric forms was a valid measure of visual motor integration processes. Finally, according to Sattler (1974) and Strauss and Lehtinen (1947, in Chalfant & Scheffelin, 1969), difficulties in Arithmetic can be caused by general disturbances of perception and behavior, or by specific perceptual disturbances produced by a deficit in the ability to organize meanings and develop perceptual schemas. The role played by the central nervous system in the effective functioning of visual motor integrative process should be obvious. Thus it could be said that specific remediation geared to the suspected area of neurological impairment may have accounted for the change noted.

Another factor to be considered is that of the practice effect relative to the visual motor component contained within the tests. However, a dramatic increase of three years was shown in Chad's scores on the Beery VMI Test, while the test-retest interval was 12 months; a significant increase of six scaled points was shown on the Object Assembly subtest, while the test-retest interval was 18 months. The long intervals between test administrations possibly discount the probability of immediate recall of the geometric forms and memory of the assembly of puzzle pieces. For Shauna, the test-retest interval was three months for the Beery VMI Test and five months for the WISC-R subtest. The shorter interval lends more credence to the influence of practice effects, but the increases shown in Shauna's test scores are not as dramatic as those shown in Chad's.

Nature of the Element Common to the Tests: Emotional Factor

A further similarity between the three tests specified is that emotional functioning can influence performance on each test. As suggested, the perceptual element is common to the three particular tests, and emotional reactions play an essential role in perception (Myers & Hammill, 1969). Individually, the Object Assembly subtest requires patience, perserverance and confidence (Carlson, 1973), factors which would naturally be affected by disturbances in emotional functioning. Beery (1967) states that support is apparent for the proposal that "emotional difficulties may be reflected in the reproduction of geometric forms" (Beery, 1967, p. 26). A lack of self confidence can be a causative factor in difficulties with Arithmetic (Carlson, 1973), and Lerner (1976) suggest that scores on social maturity and social perception have been found to be low among children with poor arithmetic ability.

Lerner (1976) explains that a disturbance in the functions of motility and perception resulting from poor maturation of the central nervous system leads to an inadequate development of ego functioning. Attempts at mastery of tasks then leads to feelings of frustration and loss of self-esteem.

Possible Explanations for Increments in Test Scores

Involvement in play therapy may have contributed to healthier emotional functioning due to the nature of the relationship established between the therapist and the child. One of the main goals of the therapist is to establish a supportative relationship with the child and through the relationship, attempt to enhance the child's self-concept. Greater feelings of self-worth experienced by the child result in healthier emotional functioning, which could accordingly have contributed to improved performance on the specified tests.

Other explanations for the increases shown in the test scores can be offered. These include specific remedial training in areas of deficit, increased emphasis on visual motor tasks in school with the advent of the transition from printing skills to writing skills, improvement in motivation/test-taking set (an emotional-constitutional element), and developmental change in visual motor integration (a cognitive element). Granted, any or all of these factors could account for some or all of the changes demonstrated by the test results, and one would not want to state categorically that the increases shown on the particular tests (Object Assembly, Beery VMI Test, and Arithmetic) were due solely to the effects of play therapy. However, if the neurological and emotional factors contributing to improved test performance have been accounted for, it is possible to develop some

hypotheses regarding the nature of the treatment process itself in effecting the outcome of test results. Following is a rationale for the hypotheses advanced, with the relationship between play therapy and improved test scores being developed.

Significance of Perception in Development

Piaget (1951) described the early development of children, and placed great emphasis on the sequential order of development: early sensorimotor learnings were suggested to be fundamental building blocks for later more complex perceptual and cognitive development.

Hebb too, in his elaborate neuro-psychological theory emphasized sequential stages of development, with early sensorimotor learning being an "integral part of the buildup of cortical cell assemblies, and hypothetical perceptual-cognitive structure" (in Dunsing & Kephart, 1973, p. 88).

Myers and Hammill (1973) suggest that perceptual motor systems are developmental in orientation, and emphasize the early motor learning and visual spatial development of the child. The development of perceptual skills is seen to be related to the levels of coordination of the body parts and systems in that better coordination results in better development of perceptions of forms and symbols.

Kephart (1973) suggests three stages of learning in development. The first stage is termed the "practical stage" and is the motor learning stage. The second stage is the "subjective" or perceptual motor stage. The last stage is the "objective" stage, and is the stage for conceptual learning. It is further suggested that the child whose perceptual skills have been developed and extended is the child who is free to benefit from instruction and to learn independently: the capacity for making

learning more effective depends on the development of perceptual skills (Getman & Kane, 1964). The basic point Kephart (1973) makes in discussing conceptual development is that the concept can be no better than the perception upon which it is based: "if perceptions lack in generalization, concepts will likely be weak, restricted or bizarre" (Kephart, 1963, p. 18). Getman (1962) concurs by stating that learning best takes place when the child's experience involves:

> movement use of the neuromuscular system (general movement patterns) practice and repetition from the combination of parts and body mechanism (special movement patterns), and the resulting interpretation of all information received and integrated by all body mechanisms (perception).
> (Getman, 1962, in Myers and Hammill, 1973, p. 115)

In summary, it appears, then, that perceptual adequacy is viewed as the "base upon which concept formation, abstraction ability, and/or cognitive symbolic behaviors are built" (Myers & Hammill, 1973, p. 20).

Relation of Perception to Test Measures Specified

As mentioned previously, the tests depicting the most significant change contained a strong perceptual element. The Object Assembly subtest, with its emphasis on shapes and parts and spatial orientation factors (Carlson, 1973) necessitates skill in perceptual integration of objects in the environment. Concerning Arithmetic, Lerner (1976) suggests that the ability to understand numerical relationships are dependent upon the childrens' experience in manipulating objects: the child with poor perception may not have had appropriate experiences with concrete or manipulative activities. Finally, Beery (1967) in discussing the Developmental Test of Visual Motor Integration states that reproduction of forms is an objective task requiring the individual's ability to interact in a perceptual way with his environment.

Since the importance of perceptual development is being emphasized, it seems expedient to discuss the relationship between the perceptual nature of the tests showing the most dramatic gains, and the possible influence of the play therapy process in contributing to perceptual development.

Perception and Implications for Play Therapy

Firstly, stress is laid on the importance in development of participation and involvement within one's environment, with the corollary that the child learns best when he is most actively involved. As mentioned previously, active involvement with one's environment assumes manipulation of the objects within one's environment. Active manipulation of objects leads to increased perceptual awareness of the properties or qualities of the object, which in turn, helps to establish the foundation for the formation of generalizable concepts about the object. Acquisition of generalizable concepts about the objects allows transfer of the concept and concept rules to different situations, and serves an adaptive purpose as it allows functioning to the demands of different situations. In terms of the role play therapy may possibly have in contributing specifically to perceptual development, the nature of the task of the therapist is to encourage and facilitate the child's active involvement and interaction with the objects in his environment, to relate and share the child's experiences with him, and subsequently to introduce new ways of participating and interacting within the environment. Again, not only does increased manipulation of objects lead to heightened perceptual awareness of the objects, but the therapist sharpens the child's awareness of the qualities of the object by pointing out object qualities and by encouraging experimentation with

its different properties. Increased perceptual awareness actively developed through the nature and structure of the play therapy sessions, could possibly be carried over into everyday life, where the child learns to become more aware of objects in his environment, and to perceive them in different ways. An increase in general perceptual awareness could possibly have been detected by the test instruments, and shown as an improvement in the results of the perceptual test scores.

Summary of Results and Discussion

In summary, play can be described as the child's way of learning, as in play, the child engages in motor, perceptual and conceptual activities. The sequence of internalized motor patterns provides the "perceptual-cognitive structure" which allows the meaningful manipulation, organization and interpretation of the object world (Dunsing & Kephart, 1973). That this view can possibly be applied to the nature of the outcome of play therapy in terms of results on test measures has been discussed. A continuation of this hypothesis in terms of the nature of the play therapy process itself will follow.

Results of the Process Component

The results obtained from the rating of the video tape segments according to the play rating system, were initially examined in terms of the frequency of each of the three play levels occurring at different stages in therapy. The percentages of play activities corresponding to each play level for the beginning and end of therapy, were also examined.

While certain similarities are seen to exist in the progressions of activities for each child, comparison between the two must be made with caution as the duration of therapy was different for each child. Thus, the progression of activities, represented by the graphs, do not correspond over time. For this reason, the results for each child will be presented separately, followed by a general discussion concerning possible reasons and explanations for the trends shown.

1. Chad

The frequency of scores obtained for each play level from each segment of video tape rated, is presented in Table 6.

TABLE 6

Chad: Frequency of Responses for Each Level of Play

Tape Segment in Sequence	Level of Play		
	sensorimotor	perceptual	conceptual
Beginning			
1	0	7	53
2	1	22	35
Middle			
3	8	51	0
4	19	39	2
End			
5	22	24	13
6	11	27	17

The tape segments were categorized into three stages of therapy, the beginning, middle, and end stages. A composite score for each play level at these time points in therapy is presented in Table 7 and illustrated in Figure 3.

TABLE 7

Chad: Composite Frequency of Play Level Scores for Each Stage of Therapy

Stage of Therapy	Level of Play		
	sensorimotor	perceptual	conceptual
Beginning	1	29	88
Middle	27	90	2
End	33	51	30

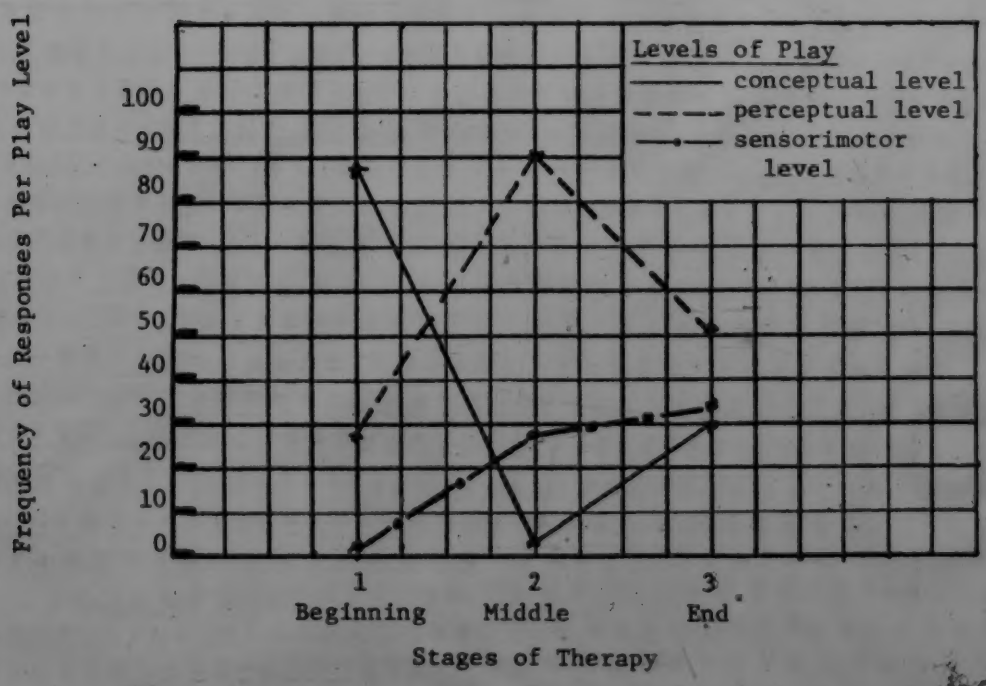

FIGURE 3

Chad: Frequency of Play Level Scores at Three Stages in Therapy

From examination of the results, several trends in the progression of play activities become evident. In Chad's case, the sensorimotor level of play activities showed a significant increase from the initial to the middle stage of therapy, while levelling off towards the final stage of therapy. Similarly, the perceptual level of play rose notably from the first stage of therapy to hit a peak at the middle stage, then decreased again toward the final stage. In contrast, the conceptual level of play initially occurred at a very high frequency, dropped sharply in the middle stages of therapy, but gradually increased towards the end of therapy.

While the progression of each level of play activities through the stages of therapy is evident, perhaps even more significant to examine is the percentage of play level activities occurring at the beginning and end stages of therapy. These percentages are reported in Table 8 and shown in Figure 4.

TABLE 8

Chad: Percentage of Play Level Activity at Beginning and End of Therapy

Stage of Therapy	Level of Play		
	sensorimotor	perceptual	conceptual
Beginning	0.8	24.6	74.6
End	28.9	44.7	26.3

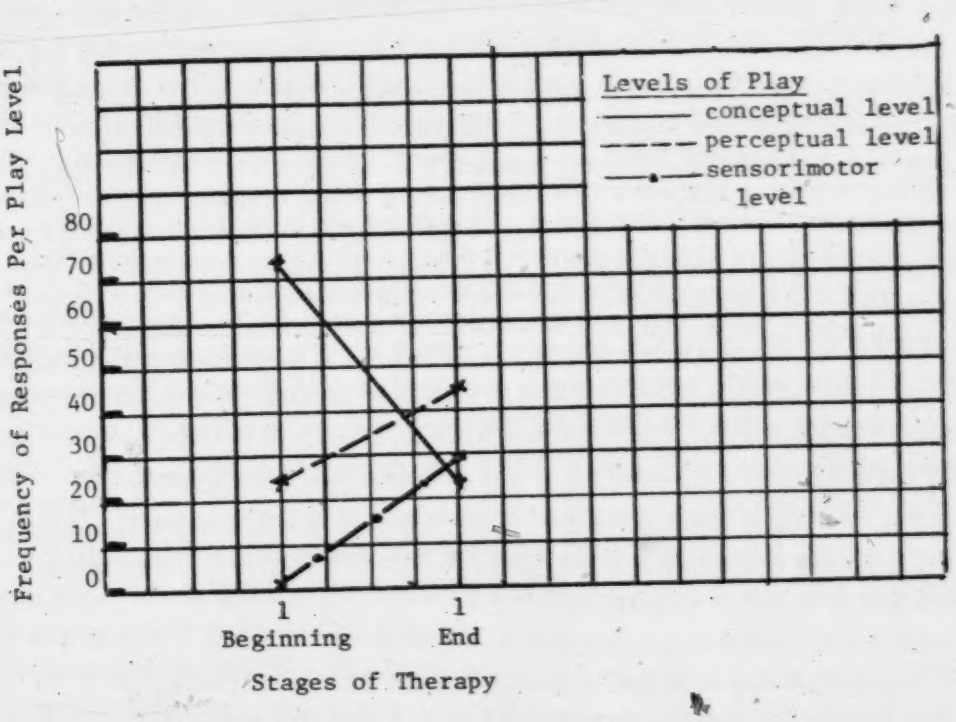

FIGURE 4

Chad: Percentage of Play Level Activity at Two Stages in Therapy

The wide disparity between the three play levels at the commencement of therapy is evident: the percentages of play level activity engaged in range from 0.8% for the sensorimotor level, to 24.6% for the perceptual level, to 74.6% for the conceptual level of play. Examination of the percentages resulting at the end stage of therapy presents an entirely different picture. Here the range between the percentage obtained for each level is significantly smaller, while the percentage themselves show little difference: 28.9% for the sensorimotor level, 44.7% for the perceptual level, and 26.3% for the conceptual level.

It appears that the wide discrepancy shown in the percentages of

the play level activities at the beginning of therapy are no longer evident. The results at the end of therapy demonstrate more of a balance among the three levels of play activities engaged in. That is, the frequencies of each level of play in the therapy session are more alike. The range between the types of play behavior has considerably lessened, indicating a fairly similar proportion for each level of play and thus demonstrating that a wider and more varied response range is being utilized. To summarize, towards the end of therapy the child appears to be engaging in almost proportionate amounts of the different levels of play activity, while at the beginning of therapy one level of play activity was predominant.

2. Shauna

In Shauna's case, the results are not as striking as those demonstrated by Chad. Perhaps a contributing factor is the shorter duration of therapy Shauna was involved in.

The frequency of scores obtained for each play level from the segments of video tape rated is presented in Table 9.

TABLE 9

Shauna: Frequency of Responses for Each Level of Play

Tape Segment in Sequence	Level of Play		
	sensorimotor	perceptual	conceptual
Beginning			
1	11	33	9
2	14	9	33
Middle			
3	6	26	16
4	6	38	12
End			
5	26	17	14
6	20	14	27

The composite scores for the three play levels at the initial, middle, and final stages of therapy are found in Table 10 and shown in Figure 5.

TABLE 10

Shauna: Composite Frequency of Play Level Scores for Each Stage of Therapy

Stage of Therapy	Level of Play		
	sensorimotor	perceptual	conceptual
Beginning	25	42	42
Middle	12	64	28
End	46	31	41

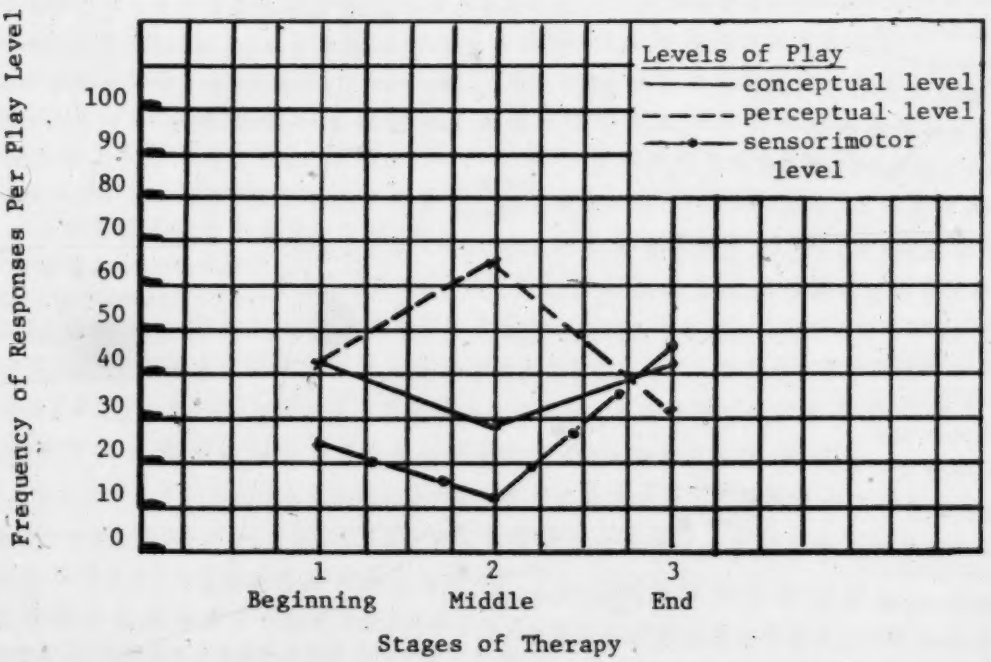

FIGURE 5

Shauna: Frequency of Play Level Scores at Three Stages in Therapy

Trends in the sequence and progression of activities corresponding to the three play levels become evident upon investigation of the data. The sensorimotor level of play activity is seen to be initially occurring at a low frequency, decreasing even more towards the middle stage of therapy, then showing a noticeable increase towards the end. The almost exact opposite trend is shown by the perceptual level of play which starts at a fairly low frequency, increases significantly toward the middle stage, then drops significantly toward the end stage. The conceptual level of play follows a pattern similar to that of the sensorimotor level: starting at a faily low frequency, it decreases towards the middle stage of therapy, but shows an increase again at the end of therapy.

The comparative percentage of the levels of play activity engaged in at the beginning and end stages of therapy can be found in Table 11 and are illustrated in Figure 6.

TABLE 11

Shauna: Percentage of Play Level Activity at Beginning and End of Therapy

Stage of Therapy	Level of Play		
	sensorimotor	perceptual	conceptual
Beginning	22.9	38.5	38.5
End	38.9	26.5	34.8

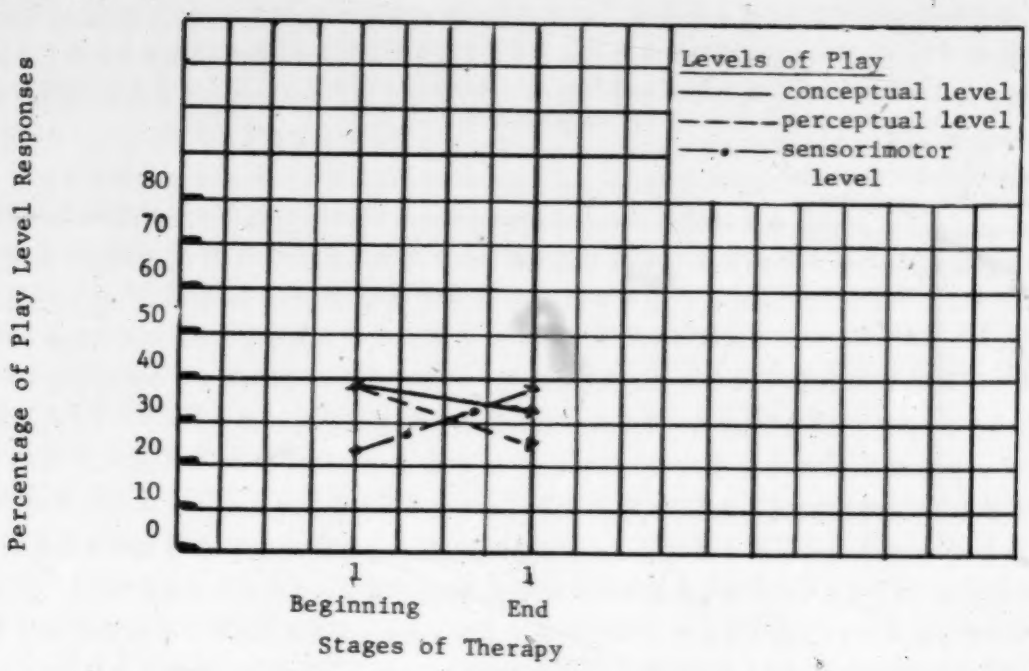

FIGURE 6

Shauna: Percentage of Play Level Activity at Two Stages in Therapy

Although the disparity between the percentages of individual play levels at the beginning and end of therapy is not extreme, some movement towards a greater uniformity or balance between levels of play is evident. Initially the percentages of the sensorimotor level was 22.9%, the perceptual level 38.5%, and the conceptual level 38.5%. At the final stage of therapy, the percentages of play activities were found to be 38.9% for the sensorimotor level, 26.3% for the perceptual level, and 34.8% for the conceptual level.

The results, although not markedly different, show a slightly higher degree of uniformity between the three levels of play activities at the end of therapy, indicating the possible use of a wider range of behavior responses.

Discussion: Process Component

Introduction

The results obtained from the use of the hierarchical play rating system to record the child's activities in a play therapy setting, appear to lend a degree of credibility to the underlying contention that the quality of the child's interaction with objects in his environment can be indicative of his ability to function adaptively in it. Support for this proposal will be presented, and will be discussed in terms of adaptive behavior as a function of play, the nature of play, the characteristics of play including actions and outcomes, results of the present study regarding play actions and outcomes and implications for play therapy. A summary will conclude the section.

Adaptive Behavior: A Function of Play

Adaptive behavior has been defined as behavior that produces immediate and measurable advantages for the individual, such behavior appearing to make a direct contribution to the maintenance and survival of the individual within its environment (Fagen, 1975). To elaborate, the individual, functioning within an environment, is susceptible to its demands. These demands are constantly changing, seldom predictable, and necessitate a wide range of responses. Functioning within the environment can be measured in terms of responses to the demands imposed by the environment (Kephart, 1961). Therefore, the individual must have available a selection of activities suited to the situations encountered in the environment, and if unsuitable, a series of alternate behaviors and activities readily at hand. Further necessary is the ability to substitute one behavior for another, to shift from one to another

according to the demands of the environment and the success in meeting those demands. The key to adapting, adjusting, and functioning at an adequate level is the availability of alternatives, not only in the behavioral processes, but also in the symbolic and conceptual levels (Kephart, 1961). Finally, the sequence of how play serves its adaptive function is probably best summarized by Reynolds (1972). Reynolds suggests that:

> the encoding of sensory motor events leads to inferential knowledge of events and their properties and to the formation of hierachically organized motor control systems called schemas that enable the observer to replicate behavior observed in others in the appropriate environmental context. (Reynolds, 1972, p. 626)

The Nature of Play

Piaget (1951) suggests that it is in play, through the processes of assimilation and accommodation, that the child adapts his behavior and changes his actions to suit the world's demands. It is widely accepted that play provides information about the environment and that the child acquires this information by acting on his environment A child's play reflects his experiences (Levenstein, 1973) and he 'plays out' themes related to his experiences.

Bruner (1972) emphasized a combination of developments necessary for play:

> a relatively pressure free environment with its concomitant increase in play exploration and observation; and at the same time, a certain challenge in the requirements of adaptation to an environment. (Bruner, 1972, p. 46)

Play reduces the stress of anticipating success and failure (Sylva, Bruner & Genova, 1974), and provides an "excellent opportunity to try combinations of behavior that would under functional pressure never be

tried" (Bruner, 1972, p. 38). Fagen (1974) agrees with this view point by suggesting that play resembles optimal learning by experimentation in a 'relaxed field', relaxed referring to the absence of goals of control.

Characteristics of Play: Actions

A characteristic of play is its "invitation to the possibilities inherent in things and events" (Sylva, Bruner & Genova, 1974, p. 244). Fagen (1975) presents the view of play in which the child must perform motor or manipulative experiments in order to acquire the information regarding the inherent possibilities. Hutt (1966) suggests that in play, the emphasis changes from learning what the object does, to learning what can be done with the object. Typically in play, a new object is "fitted into as many routines as available", or a newly mastered act is "addressed to as many different objects as possible" (Hutt, 1966). The person who plays with objects and actions gains practice in assembling them in unusual ways: "he pays attention to their details and possibilities...and is able to solve the problems he encounters in both an organized and flexible way" (Sylva, Bruner & Genova, 1974, p. 245).

Thus, a child in play is freed to invent, to rehearse, to improvise, and to modify his adaptive responses as well as to learn new or alternate solutions to life events. The importance and significance of having available a wide repertoire of responses lies primarily within the adaptive purpose it serves. A rigidity in response mode is non-adaptive; adaption requires flexibility and plasticity, and the ability to modify responses and reactions to environmental objects and events.

Characteristics of Play: Outcomes

Bruner (1975) and Fagen (1975) suggests that play with objects as well as the actions performed on the objects, have been shown experimentally to constitute effective preparation for future problem-solving, in that play allows the practice of "subroutines" of behavior necessary for arriving at solutions to problems. Further, an increased ability to manipulate objects and incorporate them into instrumental behavior leads to greater success in maintaining behavior and in actively attempting control of the environment (Garvey, 1972).

Finally, Levenstein (1973) suggest that before the child can engage in a conceptual or thematic level of play, he must first explore the real properties of objects in his play; formal conceptual learning involves the categorization of experiences on the basis of their physical properties (Reynolds, 1972).

It would appear then that new behavior patterns and their environmental consequences are learned and organized in play in that play provides a source of "increased behavioral variability, generating novel, innovative and possibly useful acts" (Fagen, 1975, p. 97). Play also provides the opportunity for exploration of 'alternate serial orders' (Sylva, Bruner & Genova, 1974), so that from one behavioral sequence with which to respond, others can be chosen from among the alternatives.

As the behavioral repertoire incorporates more behaviors, the behaviors become associated with different behavioral contexts and systems by virtue of their appropriateness to different goals to be achieved (Reynolds, 1972, p. 630). This reasoning applies particularly well to the social environment. Elements within the social environment

are also ever-changing, unpredictable, and necessitate varying and complex reactions. To adjust, to function appropriately, a range of interactive behaviors is needed, as is the ability to select and to utilize the appropriate behaviors. Play can serve as a vehicle for indoctrinating the child into the nature and conventions of his culture (Bruner, 1972), and can fit the child for the conventions that govern interactions between members of the society (Sylva, Bruner & Genova, 1974).

Present Study: Actions and Outcomes in Play

Specifically, in relation to the results obtained from the present study, a marked change in the level of functioning from the beginning to the end of therapy was recorded. From the initial stage where one level of functioning was the predominant mode, the range between the sensorimotor, perceptual and conceptual activities had noticeably decreased, and more of a balance between the three dimensions of activity was demonstrated by the scoring. In light of the argument advanced above, it appears reasonable to assume that the proportionate amounts shown of the three activity dimensions, (for Chad: 28.9% sensorimotor, 44.7% perceptual and 26.3% conceptual; for Shauna: 38.9% sensorimotor, 26.5% perceptual and 34.8% conceptual), seem indicative of the child's ability to operate at different levels, and can be further suggestive of a wider range of behavioral responses, including and encompassing the three levels of sensorimotor, perceptual and conceptual functioning.

Implications for Play Therapy

Where behavior is not well integrated and known to be instrumental to the desired effect, representation of the real life circumstance is needed (Levenstein, 1973). This is where play therapy can serve an

effective adaptive purpose in modifying, or in supplementing the child's own experience. The intention of using play in a counselling paradigm is to enhance the quality of the child's symbolic representations (Bishop, 1972), by allowing, encouraging, and facilitating the child's interactions with the objects in his environment in a non-punitive atmosphere. The consequent is the allowing, encouraging and facilitating of the rehearsal and modification of the interactions, which enables the acquisition and addition of a wider repertoire of responses, which in turn enhances the quality of the child's adaptive strategies.

In consideration of the role and nature of the therapist's participation in the therapy situation, it was stated that his purpose was to facilitate the child's expression of his representations and to encourage variability and inventivity in his play behaviors. Feithelson and Ross (1973) reported an important study which supported the significance of the role of the therapist. They found that the content of play tutoring sessions was the essential contributing factor to the acquisition and incorporation of thematic play. That is, the researchers established that while successful 'play tutoring' very possibly depended in part on a warm supportive personal relationship between tutor and child, the relationship by itself was not sufficient to evoke conceptual or thematic play.

The results of Levenstein's study (1973) can also be applied to support the importance of therapist involvement. In discussing cognitive development through verbalized play, Levenstein suggested that a child's attempt to devise unconventional ways of playing with a particular toy should be encouraged, and "like his other play activities, be put into

words for him by the person playing with him" (1973, p. 296). This suggestion is inherent in the nature of the therapist-child interaction.

Summary of Results and Discussion

It was postulated in the present study that in play, the child moves from one activity or object to another activity or object, investing himself in each as he searches for a play theme. In doing so, the child engages in possession and release of the different objects, apprehends the properties of the object capturing his attention, and eventually links sequential physical actions and verbal expressions in the comprising of a play theme. It was further postulated that a balance among the three levels of play - the sensorimotor, perceptual and conceptual levels - would be evident, the rationale being that the ability to function at different levels would be indicative of a more flexible range of behavior responses, which in turn would facilitate greater adaptation to environmental situations. Finally, it was suggested that the skilled play therapist would facilitate the child's interaction with his environment by increasing the child's activities within the environment, building the child's skills with objects in the environment, consequently enhancing his knowledge of and therefore adaptability to his environments.

From the results of the scoring of the play rating system used to monitor and evaluate the level of the child's play in a play therapy situation, it appears that the postulates gained some support. An increase was shown in the behavioral variety and flexibility of the child's interaction with objects in his environment. A greater balance between the three levels of play was evident, and is possibly indicative of the use of a wider range of responses to objects in the environment.

The value of examining the process of play and of using measurement techniques to determine therapy outcomes seems supported in the present study. Further research is needed to determine the validity of specific test results as a measure of evaluating play therapy outcome variables.

CHAPTER V

CONCLUSIONS, LIMITATIONS, AND IMPLICATIONS FOR FURTHER RESEARCH

The appropriateness and usefulness of play therapy as a therapeutic approach is widely accepted. However, the present literature pertaining to play therapy is stated to be more conjecture than evidence (McNabb, 1975), and the need for further investigation to focus on the internal dimensions of play therapy has been emphasized (Ginott, 1961; McNabb, 1975).

Previous research has stressed the need for a detailed specification of the process of play therapy in order to evaluate the effectiveness of play therapy (Pumfrey & Elliott, 1970; McNabb, 1975). Greater objectivity, quantitative recordings, and more vigorous assessment measures in the analysis of the outcome of play therapy have also been specified (Herd, 1969; West, 1969; Quattlebaum, 1970; Pumfrey & Elliott, 1970).

Thus, the focus of the present study was derived from the need for both a detailed analysis of the process in play therapy, and for a more stringent assessment of outcome measures. Specifically, the purpose of the study was twofold:

1. To obtain quantitative measures before and after the therapy treatment programs as objective means for evaluating outcomes of the therapeutic process.

2. To pilot the use of a tri-level hierarchy of play rating system for monitoring and analyzing the interaction between therapist and child. Resulting data would be used as a possible means of evaluating both outcome and process in play therapy.

The primary intent of the study then was to evaluate the process and outcome components of play therapy through an exploratory indepth analysis of the play therapy experience with two single subject cases.

Outcome Component

To evaluate the outcome of play therapy, research to date has been concerned primarily with changes in social and emotional functioning reflected by changes in pre- and post-test scores on a variety of personality tests, sociometric measures and behavior checklists. The rationale underlying the use of a pre- and post-test design has been Dorfman's (1958) finding that reliable changes in test results do occur concomitantly with a series of therapy sessions. The results of the previous studies have indicated change in social and emotional areas (Fleming & Snyder, 1947; Cox, 1953; Seeman, Barry & Ellinwood, 1964; Krivy, 1972; Pelham, 1972; Wall, 1973) but more stringent and comprehensive assessment devices were called for (Herd, 1969; West, 1969; Quattlebaum, 1970; Pumfrey & Elliott, 1970). McNabb (1975) indicated a need for defining changes along specific rather than global personality dimensions.

The approach used in the present study attempted to focus on all aspects of the individual by using a combination of test measures that encompassed and were sensitive to social, emotional and cognitive dimensions. The use of cognitive measures was in addition to the standard use of sociometric measures and personality tests. The results indicated progress through therapy with specific as well as global, and quantitative as well as qualitative changes being recorded. Global changes were noted in social and emotional functioning in the areas of

interpersonal relations, school adjustment, self-concept and family relationships. Specific changes were detected in the cognitive areas of visual motor integration processes and mathematical reasoning. These changes were considered to introduce new dimensions in the study on outcome of therapy and speculations were raised as to the nature of the therapy process in effecting the particular changes.

In summary, the results of the outcome component supported the relevant literature on the use of a pre- and post-test design to evaluate outcome and suggested a possible complement of test measures to be used.

Process Component

The need for a detailed specification (Pumfrey & Elliott, 1970; McNabb, 1975) and quantification (Levitt, 1957) of the process of play therapy has already been mentioned. Limitations and criticisms to the previous classification schemes of the play therapy process (Landisberg & Snyder, 1946; Finke, 1947; Axline, 1950; Moustakas, 1955; Cashdon, 1967; Daly & Carr, 1967; Rogers, 1969; Hendricks, 1972) have been pointed out by Lebo (1953) and Ginott (1961). However, McNabb (1975) stressed the importance of a process-oriented system of analyzing the effectiveness of play therapy, and suggested further investigation of the child's activities in play therapy.

In focusing on the nature of the play therapy process in relation to the child's play activities, the present study piloted the use of a tri-level hierarchical play rating system. The intent of the present study was to analyze the process component of play itself, and to attempt to offer hypotheses regarding the manner in which this process affects the outcomes of play therapy.

Quantitative results were obtained indicating changes in the range and quality of child's play activities from the beginning to end of therapy. A rationale for the changes noted as indicative of progression through therapy was offered.

In summary, the results obtained from the use of the play rating system to evaluate process in play therapy tended to give support to the notion that movement in play therapy can be monitored through observation of the child's play activities. Possible areas for further investigation were suggested.

Conclusion

The results from the present study indicate that further investigation of the specific test measures and play rating system used in evaluating process and outcome in play therapy, seem warranted both in practice and research.

Changes in play behavior as well as changes in personality dimensions appeared evident, and were recorded globally, specifically, qualitatively, and quantitatively. Expanded emotional variability and flexibility (both positive and negative) was noted, as was an expanded behavioral response repertoire. The dramatic increases indicated by the scores on the tests measuring perceptual and integrative processes were suggested to be related to the nature of the process as hypothesized and investigated. Further investigation of the methods used in the present study to analyze the process and outcome of play therapy was suggested.

LIMITATIONS

The basic limitation to the present study centers on the single case approach used, which necessarily restricts the opportunity to generalize from the interpretation of the results.

Specific limitations can be attached to each component of the study. For the outcome component, the limitations were seen to include that:

1. the duration of therapy, if longer, may have resulted in more noticeable changes in test scores.

2. the two subjects were not matched on the basis of pre-test scores on the various instruments, thus comparison between the test findings was not possible.

3. perhaps more specific and stringent assessment devices may have been used.

A discussion of limitations inherent in the process component should take into consideration that the play rating system was used in a pilot attempt to investigate its value. Thus limitations are evident in that:

1. the reliability and validity of the play rating system had not been firmly established.

2. interaction between therapist and child (noted in terms of exchanged eye glances and conversation) could not be rated since the play rating system was designed to rate play activities solely.

3. the rating interval of 15 seconds may have been too long an interval and thus not adequately sample the play activities.

4. the scale did not make adequate provision for play behaviors exhibited outside the range of those designated: for example, a zero level indicating zero activity as when the child is merely sitting, lying down, or looking around; or, a fourth more complex level indicating, for example, conversation to the therapist regarding the child's own play activities.

IMPLICATIONS FOR FURTHER RESEARCH

Perhaps the most obvious implication for further research is that of using a larger sample to determine if similar results occur. A matched experimental and control group with the inclusion of a placebo or "free play" group, would enable better determination of the results of therapy itself, and allow for more generalizable conclusions. The subjects could be matched on the basis of age, sex, intelligence, degree of emotionality, results from pre-test scores, and initial rating of level of play activity.

Also, the duration of therapy should be equal for all subjects, making the test-retest interval, and the interval between the calculations of initial and final proportions of play activity, equal and therefore more comparable.

In the outcome component, since the most dramatic gains were evident in the tests measuring visual motor integration processes, additional tests tapping this function could be incorporated into the test battery to further validate the improvement detected.

In terms of the process component and the play rating system, several implications for its use in further research can be proposed. Establishment of the reliability and validity of the play rating

system should be undertaken. Application of the scale to 'normal' populations of varying ages would determine normative data, and further, application of the scale to other diagnostic groups and under varying conditions (i.e. home, playground) would enable estimation of overall applicability. More information is needed on the relationship between levels of play, degree of emotionality and/or intellectual functioning. Also, categories to include therapist-child interaction could possibly be devised and added to the play hierarchy.

Significant results obtained from refinement and further testing of the scale if indicating support for the efficacy of the play rating system, would suggest that the system could be put into use as a training model, to teach ways of enhancing the quality of the child's play activities and consequently enhancing the child's adaptability within his particular environment.

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APPENDIX A

THEORIES OF PLAY

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REPRODUCED FROM: ELLIS, M. J., WHY PEOPLE PLAY
PRENTICE HALL, 1973
pp. 46-47, 78-79, 111.

Table 3.1

Classical Theories of Play

NAME	PLAY IS CAUSED:	THIS EXPLANATION ASSUMES THAT:	IT CAN BE CRITICIZED BECAUSE:
1a. Surplus Energy: I	by the existence of energy surplus to the needs of survival	1. energy is produced at a constant rate 2. if stored, storage is limited 3. excess must be expended 4. its expenditure is made on overt behavior which is by definition play	1. children play when fatigued or to the point of fatigue, so a surplus is not necessary for play 2. the process of evolution should have tailored the energy available to the energy required
1b. Surplus Energy: II	by increased tendency to respond after a period of response deprivation	1. all response systems of the body have a tendency to respond 2. the response threshold is lowered by a period of disuse 3. after periods of disuse, eventually all available responses should reach a low enough threshold to be discharged either by some stimulus events or spontaneously.	1. some responses available to the persons are never used
2. Instinct	by the inheritance of unlearned capacities to emit playful acts	1. the determinants of our behavior are inherited in the same way that we inherit the genetic code which determines our structure 2. some of those determinants cause play	1. It ignored the obvious capacity of the person to learn new responses that we classify as play 2. the facile naming of an instinct for each class of observed behavior is to do no more than to say, "Because there is play, there must be a cause which we will call an Instinct."

3. Preparation	**by the efforts of the player to prepare for later life**	1. play is emitted only by persons preparing for new ways of responding 2. the player is instinctively prepared for responses that will be critical later 3. the instincts governing this are inherited imperfectly and youth is the period during which these imperfectly inherited mechanisms are perfected	1. play occurs most frequently in animals that live in rapidly changing circumstances 2. it requires that the player inherit the capacity to predict which responses will be critical later. This requires the inheritance of information about the future 3. people do not stop playing as adults, when presumably they are acceptably prepared
4. Recapitulation	**by the player recapitulating the history of the development of the species during its development**	1. the critical behaviors occurring during the evolution of man are encoded for inheritance 2. a person emits some approximation to all these behaviors during his development 3. since these behaviors are currently irrelevant they are play 4. the stages in our evolution will be followed in the individual's development	1. there is no linear progression in our play development that seems to mirror the development of a species. At one point, late boyhood and adolescence, there may be similarity between sports and games and the components of hunting, chasing, fighting, etc., but before and after there seems little relation 2. it does not explain play activities dependent on our advanced technology
5. Relaxation	**by the need for an individual to emit responses other than those used in work to allow recuperation**	1. players work 2. play involves the emission of responses different from those of work 3. the emission of different responses eliminates the noxious byproducts of work	1. it does not explain the use in play of activities also used in work 2. it does not explain the play of children—unless they are clearly working some part of their day

Table 4.1

Recent Theories of Play

NAME	PLAY IS CAUSED:	THIS EXPLANATION ASSUMES THAT:	IT CAN BE CRITICIZED BECAUSE:
6. Generalization	by the players using in their play experiences that have been rewarding at work	1. there are at least two separable categories of behavior 2. the players transfer to play or leisure, behaviors that are rewarded in another setting 3. to be useful we understand what rewards individuals at work	1. it seems to exclude play of preschool children 2. it assumes that at least some aspects of work are rewarding
7. Compensation	by players using their play to satisfy psychic needs not satisfied in or generated by the working behaviors	1. there are at least two separable categories of behavior 2. the player avoids in play or leisure behaviors that are unsatisfying in the work setting experiences that meet his psychic needs 3. to be useful we understand the mismatch of needs and satisfactions in the work setting (or vice versa)	1. it seems to exclude play of preschool children 2. it assumes that work is damaging or does not satisfy some needs
8. Catharsis	in part by the need to express disorganizing emotions in a harmless way by transferring them to socially sanctioned activity. This concept has been limited almost entirely to questions of aggression, and will be so here	1. frustration of an intention engenders hostility towards the frustrator 2. this frustration or hostility can be redirected to another activity 3. this hostility must be expressed to reduce psychic and physiological stress	1. it is a partial explanation for only the compensatory behavior engendered by hostility 2. the data show conclusively that sanctioning aggression increases it 3. the planning of activities to provide outlets for aggression constitutes its sanctioning

9a. Psychoanalytic: I	in part by the players repeating in a playful form strongly unpleasant experiences, thereby reducing their seriousness and allowing their assimilation	1. stimulating unpleasant experiences in another setting reduces the unpleasantness of their residual effects	
9b. Psychoanalytic: II	in part by the player during play reversing his role as the passive recipient of strong unpleasant experience, and actively mastering another recipient in a similar way, thus purging the unpleasant effects	1. achieving mastery, even in a simulated experience, allows the elimination of the products of unpleasant experience by passing similar experiences on to other beings or objects	Both I and II ignore play that is not presumed to be motivated by the need to eliminate the products of strongly unpleasant experiences.
10. Developmental	by the way in which a child's mind develops. Thus play is caused by the growth of the child's intellect and is conditioned by it. Play occurs when the child can impose on reality his own conceptions and constraints	1. play involves the intellect 2. as a result of play, the intellect increases in complexity 3. this process in the human can be separated into stages 4. children pass through these stages in order	1. it doesn't account for play when and if the intellect ceases to develop
11. Learning	by the normal processes that produce learning	1. the child acts to increase the probability of pleasant events 2. the child acts to decrease the probability of unpleasant events 3. the environment is a complex of pleasant and unpleasant effects 4. the environment selects and energizes the play behaviors of its tenants	1. it doesn't account for behavior in situations where there are no apparent consequences (However this theory would maintain that there are no such settings.) 2. it doesn't account for the original contributions to behaviors made by an individual's genetic inheritance

Table 5.1

Modern Theories

NAME	PLAY IS CAUSED:	THIS EXPLANATION ASSUMES THAT:	IT CAN BE CRITICIZED BECAUSE:
12. Play as Arousal-Seeking	by the need to generate interactions with the environment or self that elevate arousal (level of interest or stimulation) towards the optimal for the individual	1. there is a need for optimal arousal 2. change in arousal towards optimal is pleasant 3. the organism learns the behaviors that result in that feeling and vice versa 4. stimuli vary in their capacity to arouse 5. stimuli that arouse are those involving novelty, complexity, and/or dissonance, i.e., information 6. the organism will be forced to emit changing behavior and maintain engagement with arousing stimuli	1. it is very general but it handles questions of work and play equally well. In fact it questions the validity of separating work from play
13. Competence/Effectance	by a need to produce effects in the environment. Such effects demonstrate competence and result in feelings of effectance.	1. demonstration of competence leads to feelings of effectance 2. effectance is pleasant 3. effectance increases the probability of tests of competence	1. for the organism to constantly test whether it can still competently produce an effect seems to require uncertainty as to the outcome. Uncertainty or information seem to be the very attributes of stimuli that are arousing 2. it can be argued that competence/effectance behavior is a kind of arousal-seeking

APPENDIX B

RESEARCH ON OUTCOME IN PLAY THERAPY

RESEARCH ON OUTCOME IN PLAY THERAPY

Experimenter, Year	Age of Sample	Area of Focus	Measures Used	Results and Recommendations
Fleming & Snyder 1946	8 - 11	adjustment	Rogers' Personality Test sociometric measures (acceptance, rejection) Peer Rating Scale	experimental group improved in personal feelings to self; least improvement in social adjustment
Cox 1953	5 - 13	interpersonal relations individual adjustment	Thematic Apperception Test sociometric measures Adjustment Questionnaires	experimental group improved in adjustment scores and peer rating scores projectives yield reasonably valid results
Dorfman 1958	9 - 12	adjustment	Rogers' Test of Personality Adjustment Machover Human Figure Drawing Sentence Completion Form Follow-up Letters	suggests that research be done as group project with a number of therapists so that results may be more validly generalized
Seeman & Barry & Ellinwood 1964	8 - 9	interpersonal relations	Tuddenham Reputation Test Radke Yarrow Teacher Rating Scale	experimental group perceived as significantly less maladjusted
Herd 1969	6 - 11	interpersonal relations	California Test of Personality Vineland Social Maturity Scale Haggerty-Olson-Wickman Behavior Rating Scale School grades sociometric measures	possible insensitivity of instruments resulted in recommendation of pen and pencil tests and more sensitive measuring instruments
West 1969	6 - 11	learning effectiveness problem behavior emtional problem	Wechsler Intelligence Scale for Children Goodenough-Harris Draw-A-Person Self-Esteem Inventory School Apperception Method Sociometric Measure	no difference between groups; instruments used may have been inadequate; suggest longer term treatment, larger sample, more stringent experimental assessment
Quattlebaum 1970	11	adjustment intellectual functioning	Rorschach Draw-A-Person Thematic Apperception Test	no difference between groups; recommended large scale research: team of counsellers using different techniques
Krivy 1972	8 - 9	under-achievement adjustment	Sentence Completion Test (Dorfman) Behavior Checklist (Erikson's stages)	experimental group showed improvement according to Sentence Completion; Checklist inadequate for individual differences
Pelham 1972	5 - 6	social maturity classroom behavior	Missouri Childrens' Picture Series Childrens' Self-Social Constructs Test Behavior Problem Checklist	experimental group showed improvement in classroom behaviors, developed more complex self-concepts
Wall 1973	6 - 13	self-concept motivation behavorial change	Self Concept Motivational Inventory Bulk's Behavior Rating Scale	experimental group showed positive changes in self-concept, academics, motivation

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APPENDIX C

VARIABLES IN PROCESS/OUTCOME RESEARCH IN PLAY THERAPY: SUBJECT AGE, SUBJECT NUMBER, DURATION OF TREATMENT

VARIABLES IN PROCESS/OUTCOME RESEARCH IN PLAY THERAPY:
SUBJECT AGE, SUBJECT NUMBER, DURATION OF TREATMENT

Experimenter, Year	Age of Subjects	No. of Subjects in Treatment Group	Session Length	Treatment Length
1. Outcome Research				
Fleming & Snyder, 1947	8 - 11	7 (4M, 3F)	30 minutes twice weekly	12 sessions
Cox, 1953	5 - 13	9	—	10 sessions
Dorfman, 1958	9 - 12	17 (12M, 5F)	—	19 sessions
Seeman, et al., 1964	8 - 9	8	—	37 sessions
Herd, 1969	6 - 11	10	—	10 sessions
West, 1969	6 - 11	10	—	10 sessions
Quattlebaum, 1970	11	3	—	16 sessions
Krivy, 1972	8 - 9	9	30 minutes	7 sessions
Pelham, 1972	5 - 6	9	45 minutes	6-8 sessions
Wall, 1973	6 - 13	24	30 minutes twice weekly	24 sessions
2. Process Research				
Landisberg & Snyder, 1946	5 - 6	4	—	—
Finke, 1947	5 - 11	6	—	8-14 sessions
Axline, 1950	—	22	—	—
Lebo, 1953	—	—	—	—
Moustakas, 1955a	4	9	—	4 sessions
Moustakas & Schalock, 1955	4	5 (4M, 1F)	40 minutes	2 sessions
Cashdon, 1967	—	—	—	—
Daly & Carr, 1967	5	1	—	9 sessions
Rogers, 1969	—	—	—	—
Hendricks, 1972	8 - 10	10 (M)	—	12 sessions
3. Comparison of Treatment Modalities Research				
Perkins, 1968	8 - 9	9	20 minutes 3 times weekly	9 sessions
Rhinard, 1970	6 - 7	—	40 minutes 3 times weekly	24 sessions
Siegel, 1971	7 - 10	4	—	16 sessions

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APPENDIX D

VARIABLES IN PROCESS/OUTCOME RESEARCH IN PLAY THERAPY: SAMPLE SIZE, TYPE OF TREATMENT, GROUP SIZE

VARIABLES IN PROCESS/OUTCOME RESEARCH IN PLAY THERAPY:

SAMPLE SIZE, TYPE OF TREATMENT, GROUP SIZE

Experimenter	Year	Sample Size	Number of Groups	Type of Group:	Treatment Received:	Group Size
Outcome Research						
Fleming & Snyder	1947	30	4	experimental:	individual play therapy	4M
				experimental:	individual play therapy	3F
				control:	no treatment	13M
				control:	no treatment	10F
Cox	1953	18	2	experimental:	individual play therapy	9
				control:	no treatment	9
Dorfman	1958	17	2	experimental:	individual play therapy	--
				control:	no treatment	--
Seeman et al.	1964	16	2	experimental:	individual play therapy	8
				control:	no treatment	8
Herd	1969	26	3	experimental:	individual play therapy	10
				control:	no treatment	10
				placebo:	play sessions, no therapy	6
West	1969	26 (19M, 7F)	3	experimental:	individual play therapy	10
				placebo:	attendance at clinic, no therapy	6
				deferred:	regular school work, no treatment	10
Quattlebaum	1970	9	3	experimental:	individual play therapy	3
				control:	no therapy	3
				placebo:	individual counselling	3
Krivy	1972	27 (20M, 7F)	3	experimental:	individual play therapy	9
				control:	no therapy	9
				placebo:	supervised play sessions	9
Pelham	1972	35	3	experimental:	individual play therapy	9
				experimental:	group play therapy	9
				control:	no treatment	18
Wall	1973	47	5	4 experimental:	group play therapy: 6/group	24
				control:	no therapy	
Process Research						
Landisberg & Snyder	1946	4	--	individual:	play therapy	--
Finke	1947	6	--	individual:	play therapy	--
Axline	1950	22	--	individual:	play therapy	--
Moustakas	1955a	9	--	individual:	play therapy	--
Moustakas & Schalock	1955	5	--	individual:	play therapy	--
Hendricks	1972	10	--	individual:	play therapy	--
Comparison of Treatment Research						
Perkins	1968	27	3	experimental:	individual play therapy	9
				experimental:	reinforcement therapy	9
				control:	no therapy	9
Rhinard	1970	--	2	experimental:	individual play therapy	--
				experimental:	behavior modification	--
Siegel	1971	16	4	1 primary intervention:	educational i.e. special class, tutoring	4
				3 secondary intervention:	psycotherapeutic 1. play therapy	4
					2. parental counselling	4
					3. play therapy & parental counselling	4

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APPENDIX E

TEST SELECTION: INSTRUMENTS USED

AND

VARIABLES INVESTIGATED

TEST SELECTION: INSTRUMENTS USED AND VARIABLES INVESTIGATED

Instruments Used	Variables Investigated
Wechsler Intelligence Scale for Children - Revised (WISC-R)	present intellectual capacity in terms of Verbal IQ, Performance IQ and Full Scale IQ
Wide Range Achievement Test	level of functioning in school related subjects in terms of a reading and arithmetic grade level and percentile rank
Beery Developmental Test of Visual Motor Integration	difficulties in the area of visual motor integration in terms of a visual motor integration age equivalent
Bristol Social Adjustment Guide (Child in the Family Edition)	parent-child relationships and type of family situation
Family Relations Test	the child's emotional attitudes to his family members and the attitudes he believes family members have towards him
Coopersmith Self-Esteem Inventory	evaluative attitudes toward the self in domains of peers, parents, school and personal interests
Coopersmith Behavior Rating Form	behaviors related to self-esteem such as reaction to failure, self-confidence, sociability with peers
Childrens' Apperception Test	personality characteristics and common childhood problems such as sibling rivalry, aggression, etc.
Human Figure Drawing	attitudes towards self and others; present fears and anxieties
Kinetic Family Drawing	dynamics of the family situation